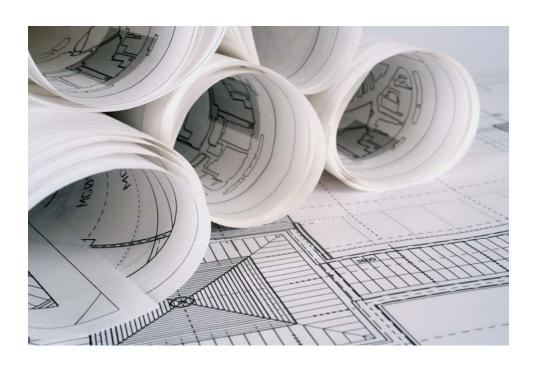


# ARCHITECT LAUNDRY PLANNING FILE



## Laundry Systems for hotels and motels

## WHY INSTALL AN ON-PREMISES LAUNDRY?

## 1. Launder everything on premises.

A MILNOR on-premises laundry can handle all of a hotel/motel's clean fabric needs in a simple manner. MILNOR washer-extractors can process bath and bed linens, blankets, pillows, restaurant and banquet napery, and kitchen linen, plus such items as employee uniforms, slip covers and cleaning rags and mops. Many types of rugs and drapes can be processed in a MILNOR on-premises laundry.

## 2. Distinctive linens build prestige.

Many hotel and motel operators have enhanced their image of quality through tasteful fabric selection. Everything from linen to drapes can be selected in the colors and patterns of your choice.

## 3. Get more use from less inventory.

An on-premises laundry provides more use from less inventory. Table napery, bath linen, and other goods can be laundered immediately after use and be ready again in about an hour if necessary. Smaller inventories mean less storage space and more money for investment elsewhere.

## 4. You won't be caught short.

On-premises laundering eliminates "caught short" situations. It gives you a ready supply of towels, sheets, napkins, tablecloths, and uniforms. This is especially important during weekends and holidays, when outside services are not available.

## 5. Control quality, sanitation.

On-premises laundering assures quality processing because you are in control. You can prolong fabric life by using a distinct formula for the specific degree of soil. MILNOR's E-P Plus® washer-extractors make this easy, with several specific formulas developed and field-tested by chemists for hotels and motels. MILNOR washer-extractors also combine commercial washing action with the ability to wash at precise temperatures for different soil conditions.

## WHAT IS NEEDED FOR AN ON-PREMISES LAUNDRY?

## 1. Equipment

Operating a hotel/motel on-premises laundry is simple. Washer-extractor, dryer, sink, folding table, supplies and, in some cases, a small ironer are generally all you need. Often, an institution's existing hot water, gas and electrical services are sufficient. An on-premises laundry is basically an extension of your present services.

A top quality washer-extractor, with a proven track record in commercial use, brings professional laundering ability to your institution. It will make better use of water and soap, improve washing quality, and handle bulky items. It's best to get a machine with a large cylinder, which provides the ability to launder items such as pillows, rugs and draperies.

Dryers can use gas, steam or electric heat (gas is regarded as the most efficient). For faster drying and less wrinkling of polyester materials, it is generally desirable for the dryer to be rated at a slightly larger capacity than the washer-extractor. Small ironers are available for hotels and motels when the need for finished table linen is critical. Hotels with 200 or more rooms generally find a full-sized ironer reduces labor while also increasing the quality of finished goods. An area for folding is necessary for no-iron goods. After finishing, the items simply have to be stored.

## 2. Space

An on-premises laundry doesn't require much space. An existing storage room is adequate for many facilities. An unproductive room with a poor location may also be used or a combination of these rooms could be used in a large institution. A larger, central laundry can serve affiliated facilities near each other. A MILNOR dealer's laundry-planning department provides specially prepared layout drawings for facilities.

### 3. Labor

In small hotels and motels there is no need for additional help. Existing housekeeping employees can handle the laundry during the slower parts of the day. Equipment that is easy to operate is essential to maintain consistent quality and production. MILNOR's E-P Plus machines are particularly easy to use. The operator simply loads the machine, pushes a button to select the formula, pushes the start button, and can go on to other tasks since the machine requires no more attention.

## WHAT SHOULD YOU LOOK FOR IN A WASHER-EXTRACTOR?

## 1. Easy operation

The washer-extractor you select should have easy, automatic controls that make operation simple and free the operator to handle other duties. With MILNOR's preprogrammed E-P Plus machines, the operator simply matches the type of goods being loaded to the formula named for these goods ("towels", for example), then pushes a button. Operation of field-programmable formulas is similar. Formulas on the alphanumeric display can be named to match goods, making selection easy. Because so little judgment is required, new employees get the knack quickly. Substitute employees can take over with ease, too.

Automatic supply injection further reduces operator responsibility and helps ensure consistent quality. MILNOR machines readily accept liquid chemicals, making hookup fast and easy. Other factors to look for are a large, accessible door for fast loading/unloading, and door safety interlock which prevents opening while the machine is operating.

## 2. Laundering quality

Washing flexibility should not be sacrificed for operation simplicity. Only a commercial washer-extractor, with professional tumble washing action, can properly clean items like heavily-soiled kitchen and restaurant linen.

A cylinder with a large diameter should be among the top priorities when choosing a washer-extractor. The large diameter provides the lift and drop action necessary to clean hard-to-launder items. When comparing machines, compare actual cylinder dimensions and specific cubic foot volumes.

Also, look for microprocessor controls, which give a greater range of processing choices as well as more accurate control over how goods are processed. The preprogrammed formulas in MILNOR machines were developed specifically for the needs of hotel/motel laundries. They are not common-denominator formulas. The formulas differ in number, type, time, and temperature of baths, as well as supply injection. By pushing a button, these formulas can be adjusted for either permanent press or all-cotton fabrics. The machines are available in 25 to 160 lb. capacities.

## 3. Heavy duty construction

Rugged construction -- from top quality materials -- is imperative if you expect long-term service. Check competitive brands to see if their construction stands up to MILNOR specifications. Compare spec literature. There can be a big difference in quality.

MILNOR machines stand apart from others with features like:

- large, tapered roller bearings and a triple shaft seal to shield the bearings from water
- the exclusive use of continuous, rather than spot, welding for greater strength and reliability
- the simplicity and dependability of heavy duty, single-speed motors
- pre-extract load balancing speed to reduce vibration and extend machine life, and
- a console constructed of heavy gauge materials



## **HOTEL-MOTEL WASHER-EXTRACTOR CAPACITIES**

King sheets <sup>s</sup>	Weight In Lbs. 2	MILNOR 25 lb. models 13	MILNOR 35 lb. models 18	MILNOR 40 lb. models 20	MILNOR 45 lb. models 23	MILNOR 60 lb. models 30	MILNOR 80 lb. models 40	MILNOR 100 lb. models 50	MILNOR 140 lb. models 70	MILNOR 160 lb. model 80	MILNOR 275 lb. model 138
Queen sheets <sup>s</sup>	1.9	13	18	21	24	32	42	53	74	84	145
Double sheets <sup>S</sup>	1.8	14	20	23	26	34	46	57	80	91	157
Twin sheets <sup>s</sup>	1.3	20	28	32	36	48	64	80	112	128	220
Pillow cases <sup>S</sup>	0.3	100	140	160	180	240	320	400	560	640	1100
Pillow cases <sup>L</sup>	0.3	96	135	154	173	231	308	385	538	615	1058
Bed Spreads (Double)	3.5	7	10	11	13	17	23	29	40	46	79
Duvet Covers (Double)	3.7	7	9	11	12	16	22	27	38	43	74
Duvet Covers (Queen)	3.9	6	9	10	12	15	21	26	36	41	71
Duvet Covers (King)	4.4	6	8	9	10	14	18	23	32	36	63
Blankets	2.2	11	16	18	20	27	36	45	64	73	125
Bed pads	2.8	9	13	15	16	22	29	36	51	58	100
Pillows	1.6	16	22	25	28	38	51	63	89	101	174
Bath towelss	0.4	63	88	100	113	150	132	250	350	400	688
Bath towels <sup>p</sup>	0.5	46	65	74	83	111	200	185	259	296	509
Hand towelss	0.2	139	194	222	250	333	148	556	778	889	1528
Hand towels <sup>P</sup>	0.2	167	233	267	300	400	444	667	933	1067	1833
Wash cloths <sup>S</sup>	0.1	417	583	667	750	1000	533	1667	2333	2667	4583
Wash cloths <sup>p</sup>	0.1	250	350	400	450	600	1333	1000	1400	1600	2750
Bath mats	0.5	50	70	80	90	120	160	200	280	320	550
Table cloths (54x54)	0.7	34	48	55	62	82	110	137	192	219	377
Table cloths (72X 72)	1.2	22	30	35	39	52	70	87	122	139	239
Napkins (20x20)	0.12	208	292	333	375	500	667	833	1167	1333	2292
Dress (Uniforms)	0.7	36	50	57	64	86	114	143	200	229	393
Jackets (attendants)	0.75	33	47	53	60	80	107	133	187	213	367
Aprons (bib)	0.4	63	88	100	113	150	200	250	350	400	688
Aprons (tea)	0.2	125	175	200	225	300	400	500	700	800	1375
Pants	1.15	22	30	35	39	52	70	87	122	139	239
Shirts	0.5	50	70	80	90	120	160	200	280	320	550
Draperies (84x96)	5.91	4	6	7	8	10	14	17	24	27	47
Entry mats (36x60)	7.99	3	4	5	6	8	10	13	18	20	34
Furniture covers	2.08	12	17	19	22	29	38	48	67	77	132
Cleaning rags	0.11	227	318	364	409	545	727	909	1273	1455	2500
Mop heads 12"	0.5	50	70	80	90	120	160	200	280	320	550
Mop heads 24"	1.1	23	32	36	41	55	73	91	127	145	250
S=Standard L=Lux	urv P=Plu	sh extra thick	<b>'</b>								

S=Standard L=Luxury P=Plush, extra thick

These figures are based on sample items. Weights and sizes of some brands differ, and therefore the figures should be used only as guidelines



## Laundry Systems for schools, colleges, clubs and pro teams

## WHY INSTALL AN ON-PREMISES LAUNDRY?

## 1. Launder everything on premises.

A MILNOR on-premises laundry can handle all of an athletic facility's clean fabric needs in a simple manner. MILNOR washer-extractors can process game, practice and physical education uniforms, towels, socks, jocks, undershirts and sweatsuits, plus such items as mop heads, rags, protective pads, tennis and basketball shoes, and many types of dummy and sled covers.

## 2. You won't be caught short.

On-premises laundering eliminates "caught short" situations. It gives you a ready supply of towels, socks, jocks and undershirts. This is especially important during weekends and holidays, when outside services are not available.

## 3. Get more use from less inventory.

An on-premises laundry provides more use from less inventory. Smaller stocks meet your needs since you are no longer dependent on pickup and delivery. Towels, socks and undershirts can be laundered immediately after use and be ready again in about an hour if necessary. Smaller inventories mean less storage space and more money for investment elsewhere.

## 4. Control quality, sanitation.

On-premises laundering assures quality processing because you are in control. You can prolong fabric life by using a distinct formula for the specific degree of soil. MILNOR's E-P Plus<sup>®</sup> washer-extractors make this easy, with several specific formulas developed and field-tested by chemists for athletic facilities.

## 5. Minimize staph infection.

Because items in an athletic facility are often used from a common inventory, it is important to maintain strong, sanitary safeguards. Milnor washer-extractors, which combine commercial washing action with the ability to wash at high temperatures, can help prevent staph contamination of laundry. Besides helping prevent staph infection, immediate, professional laundering of equipment in an on-premises laundry also keeps the locker room better smelling since foul-smelling equipment goes straight to the laundry.

## WHAT IS NEEDED FOR AN ON-PREMISES LAUNDRY?

## 1. Equipment

Operating an athletic on-premises laundry is simple. Washer-extractor, dryer, sink, folding table and supplies are generally all you need. Often, an institution's existing hot water, gas, and electrical services are sufficient. An on-premises laundry is basically an extension of the locker room.

A top quality washer-extractor, with a proven track record in commercial use, brings professional laundering ability to your institution. It will make better use of water and soap, improve washing quality, and handle bulky items. It's best to get a machine with a large cylinder, which provides the ability to launder items such as uniforms, mop heads, and cleaning rags.

Dryers can use gas, steam, or electric heat (gas is regarded as the most efficient). For faster drying and less wrinkling of polyester materials, it is generally desirable for the dryer to be rated at a slightly larger capacity than the washer-extractor. An area for folding is necessary, too. A 2' x 6' table proves sufficient for most institutions. After folding, the items simply have to be stored.

## 2. Space

An on-premises laundry doesn't require much space. An equipment room or an existing storage room is adequate for many facilities. MILNOR washer-extractors have been installed in corners, walk-in closets, basements and garages. A MILNOR dealer's laundry planning department provides specially prepared layout drawings for large facilities at no charge.

## 3. Labor

In some institutions, there is no need for additional help. Existing employees can handle the laundry during the slower parts of the day. In schools, labor can often be recruited from the student body, using free tickets to athletic events as inducements. Equipment that is easy to operate is essential to maintain consistent quality and production. MILNOR's E-P Plus machines are particularly easy to use. The operator simply loads the machine, pushes a button to select the formula, pushes the start button, and can go on to other tasks since the machine requires no more attention.

## WHAT SHOULD YOU LOOK FOR IN A WASHER-EXTRACTOR?

## 1. Easy operation

The washer-extractor you select should have easy automatic controls that make operation simple and free the operator to handle other duties. With MILNOR's preprogrammed E-P Plus machines, the operator simply matches the type of goods being loaded to the formula named for these goods ("towels", for example), then pushes a button. Operation of field-programmable formulas is similar. Formulas on the alphanumeric display can be named to match goods, making selection easy. Because so little judgment is required, new employees get the knack quickly. Substitute employees can take over with ease, too.

Automatic supply injection further reduces operator responsibility and helps ensure consistent quality. MILNOR machines readily accept liquid chemicals, making hookup fast and easy. Other factors to look for are a large, accessible door for fast loading/unloading, and a door safety interlock which prevents opening while the machine is operating.

## 2. Laundering quality

Washing flexibility should not be sacrificed for operation simplicity. Only a commercial washer-extractor, with professional tumble washing action, can properly clean ground-in dirt and grass and blood stains.

A cylinder with a large diameter should be among the top priorities when choosing a washer-extractor. The large diameter provides the lift and drop action necessary to clean hard-to-launder items. When comparing machines, compare actual cylinder dimensions and specific cubic foot volumes.

Also, look for microprocessor controls which give a greater range of processing choices as well as more accurate control over how goods are processed. The pre-programmed formulas in MILNOR machines were developed specifically for the needs of healthcare facilities. They are not common-denominator formulas. The formulas differ in number, type, time and temperature of baths, as well as supply injection. By pushing a button, these formulas can be adjusted for either permanent press or all-cotton fabrics. The machines are available in 25 to 160 lb. capacities.

## 3. Heavy duty construction

Rugged construction -- from top quality materials -- is imperative if you expect long-term service. Check competitive brands to see if their construction stands up to MILNOR specifications. Compare spec literature. There can be a big difference in quality.

MILNOR machines stand apart from others with features like:

- large, tapered roller bearings and a triple shaft seal to shield the bearings from water
- the exclusive use of continuous, rather than spot, welding for greater strength and reliability
- the simplicity and dependability of heavy duty, single-speed motors
- pre-extract load balancing speed to reduce vibration and extend machine life, and
- a console constructed of heavy gauge materials

## LAUNDRY TEVS

JUNE 2010 Crain

## Birmingham-Southern College tackles football laundry

BIRMINGHAM, Ala. — Anyone from Alabama can tell you that college football is the state's most revered pastime. And, as recently as a few years ago, Birmingham-Southern College (BSC) students had to choose between Alabama and Auburn to get their football fix.

But in 2007, after a 68-year hiatus (the school didn't field a team from 1940 through 2006), Birmingham-Southern College Panther fans had their own squad to cheer for again.

Under the direction of veteran Athletic Director Joe Dean and newly elected President David Pollick, the college began hiring coaches, scouting players, and acquiring the necessary equipment to accommodate its resurrected football program.

With 125 football players and all their laundry, Birmingham-Southern understood that



Instead of segregating loads by linen type, the team uses Laundry Loops to connect each player's gear for laundering.

quality and durability were vital in choosing its equipment. Pellerin Milnor Corp. machinery had been installed in the college's baseball locker room and student athletic center several years earlier, so the college sought out the company again for its on-premise laundry equipment.

"We've been here 11 years now and they've been very reliable," says Mike Robinson, Striplin Fitness Center manager, of the Milnor equipment. "They do a great job and fit our needs well."

The versatile washer-extractor and dryer are used to clean the college's volleyball uniforms and practice gear, as well as the fitness center's terry towels and mop heads. The microproces-

washing towels, practice T-shirts, practice shorts, socks, game jerseys and compression shirts.

Instead of segregating loads by linen type, the team uses Laundry Loops — each strap can connect 8-10 items, ideal for laundering personal garments — for each player's gear. This process helps organize the clean uniforms for easy distribution to the players' assigned lockers.

## "We are very pleased with the production of the washers and dryers." – Tim Sanders, Assistant Coach and Equipment Manager

sor control has preprobeen grammed with typical and specific wash formulas based on the center's linen types. Many people can use the equipment. In fact, every volleyball player has a week of laundry duty to share the responsibility.

Across campus, Birmingham-Southern's state-

of-the-art football facility includes two 60-pound-capacity, 30022 T5X washer-extractors, and two matching 75-pound-capacity, commercial M758V dryers. BSC students participating in the work-study program operate these machines at least twice a day,



Birmingham-Southern's football facility includes two washer-extractors and two dryers, all from Pellerin Milnor Corp.

"We are very pleased with the production of the washers and dryers," says Tim Sanders, assistant coach and equipment manager. "We have a lot of laundry that comes in and out, and it certainly has been ideal for us to have this capacity and high quality." ALN

## Sample Layouts for athletic laundries

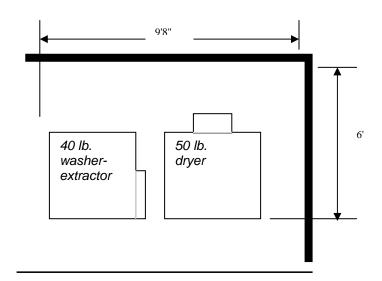


PELLERIN MILNOR CORPORATION

504/712-7656 • www.milnor.com • E-mail: milnorinfo@milnor.com

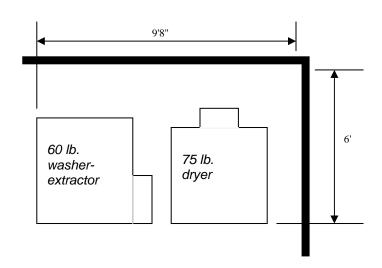
## 100-130 towels per hour

MILNOR model 30015 VRJ washer-extractor



## 150-185 towels per hour

MILNOR model 30022 T6X washer-extractor



Towel volumes shown with layouts should be used only as guidelines, as towel weights and sizes differ. Figures are based on 1.25 loads an hour. Sample layouts should not be used for construction, as individual requirements and space availability will vary.

## An on-premises laundry can also handle many other items in-house...

... including athletic clothing, washable athletic shoes, staff and maintenance uniforms, mats and throw rugs, wiping cloths, mop heads, and restaurant linens. Service charges for laundering members' clothing can help pay for the machines.

B22SL80004/14346



# ATHLETIC WASHER-EXTRACTOR CAPACITIES

	weight in Ibs.	MILNOR 25 lb. models	MILNOR 35 lb. models	MILNOR 40 lb. models	MILNOR 45 lb. models	MILNOR 60 lb. models	MILNOR 80 lb. models	MILNOR 100 lb. models	MILNOR 140 lb. models	MILNOR 160 lb. models
Towels	0.4	63	88	100	113	150	200	250	350	400
T-shirts	0.35	71	100	114	129	171	229	286	400	457
Shorts	0.44	57	80	91	102	136	182	227	318	364
Socks (1 pair)	0.08	313	438	500	563	750	1000	1250	1750	2000
Compression shirts	0.25	100	140	160	180	240	320	400	560	640
Football pants	0.75	33	47	53	60	80	107	133	187	213
Nylon mesh jerseys	0.25	100	140	160	180	240	320	400	560	640
Cotton jerseys	0.4	63	88	100	113	150	200	250	350	400
Baseball uniforms	1.15	22	30	35	39	52	70	87	122	139
Sweatshirts	0.45	56	78	89	100	133	178	222	311	356
Sweatpants	0.45	56	78	89	100	133	178	222	311	356
Equipment bags	1.3	19	27	31	35	46	62	77	108	123
Swimming suits	0.33	76	106	121	136	182	242	303	424	485
Mop heads 12"	0.5	50	70	80	90	120	160	200	280	320
Mop heads 24"	1.1	23	32	36	41	55	73	91	127	145

These figures are based on sample items. Weights and sizes of some brands differ, and therefore the figures should be used only as guidelines.

PELLERIN MILNOR CORPORATION, P.O. Box 400, Kenner, LA 70063-0400 Phone: 504-712-7656 Fax: 504-468-3094 http://www.milnor.com E-mail: milnorinfo@milnor.com

## Laundry Systems for long term care institutions

### WHY INSTALL AN ON-PREMISES HEALTHCARE LAUNDRY?

## 1. Launder everything on premises.

A MILNOR on-premises laundry can handle all of a healthcare institution's clean fabric needs in a simple manner. MILNOR washer-extractors can process patient gowns, pajamas and personal apparel, adult diapers, towels, linens, mattress covers, blankets, pillows, plus such items as employee uniforms, slip covers and cleaning rags. Many types of rugs and drapes can be processed in a MILNOR on-premises laundry.

## 2. Enhance the image of your institution.

Many operators have enhanced their image of quality, and brightened their patient's environment, through tasteful fabric selection. Everything from linen to drapes can be selected in the colors and patterns of your choice and processed in your MILNOR equipment.

## 3. Get more use from less inventory.

An on-premises laundry provides more use from less inventory. Smaller stocks meet your needs since you are no longer dependent on pickup and delivery. Towels, linens, and patients' apparel can be laundered immediately after use and be ready again in about an hour if necessary. Smaller inventories mean less storage space and more money for investment elsewhere.

## 4. You won't be caught short.

On-premises laundering eliminates "caught short" situations. It gives you a ready supply of adult diapers, linens, towels, patient gowns, and pajamas. This is especially important during weekends and holidays when outside services are not available.

## 5. Control quality, sanitation.

On-premises laundering assures quality processing because you are in control. You can prolong fabric life by using a distinct formula for the specific degree of soil. MILNOR's E-P Plus® washer-extractors make this easy, with several specific formulas developed and field-tested by chemists for healthcare facilities. MILNOR washer-extractors also combine commercial washing action with the ability to wash at high temperatures so you can be sure sanitary safeguards can be maintained. MILNOR Staph Guard® washer-extractors, installed in a wall separating clean and soiled areas, are available for medium and large sized institutions where infection control is vital.

## WHAT IS NEEDED FOR AN ON-PREMISES LAUNDRY?

## 1. Equipment

Operating a healthcare on-premises laundry is simple. Washer-extractor, dryer, sink, folding table, and supplies are generally all you need. Often, an institution's existing hot water, gas, and electrical services are sufficient. An on-premises laundry is basically an extension of your present services.

A top quality washer-extractor, with a proven track record in commercial use, brings professional laundering ability to your institution. It will make better use of water and soap, improve washing quality, and handle bulky items. It's best to get a machine with a large cylinder, which provides the ability to launder items such as diapers, mop heads, and cleaning rags.

Dryers can use gas, steam or electric heat (gas is regarded as the most efficient). For faster drying and less wrinkling of polyester materials, it is generally desirable for the dryer to be rated at a slightly larger capacity than the washer-extractor. An area for folding is necessary, too. A 2' x 6' table proves sufficient for most institutions. After folding, the items simply have to be stored.

## 2. Space

An on-premises laundry doesn't require much space. An equipment room or an existing linen storage room is adequate for many facilities. An unproductive room with a poor location may also be used or a combination of these rooms could be used in a large institution. A larger, central laundry can serve affiliated facilities near each other. A MILNOR dealer's laundry planning department provides specially prepared layout drawings for facilities at no charge.

## 3. Labor

In some institutions there is no need for additional help. Existing housekeeping and maintenance employees can handle the laundry during the slower parts of the day. Equipment that is easy to operate is essential to maintain consistent quality and production. MILNOR's E-P Plus machines are particularly easy to use. The operator simply loads the machine, pushes a button to select the formula, pushes the start button, and can go on to other tasks since the machine requires no more attention.

## WHAT SHOULD YOU LOOK FOR IN A WASHER-EXTRACTOR?

## 1. Easy operation

The washer-extractor you select should have easy, automatic controls that make operation simple and free the operator to handle other duties. With MILNOR's preprogrammed E-P Plus machines, the operator simply matches the type of goods being loaded to the formula named for these goods ("towels", for example), then pushes a button. Operation of field-programmable formulas is similar. Formulas on the alphanumeric display can be named to match goods, making selection easy. Because so little judgment is required, new employees get the knack quickly. Substitute employees can take over with ease, too.

Automatic supply injection further reduces operator responsibility and helps ensure consistent quality. MILNOR machines readily accept liquid chemicals, making hookup fast and easy. Other factors to look for are a large, accessible door for fast loading/unloading, and door safety interlock which prevents opening while the machine is operating.

## 2. Laundering quality

Washing flexibility should not be sacrificed for operation simplicity. Only a commercial washer-extractor, with professional tumble washing action, can properly clean stained linen, soiled diapers, and dirty apparel.

A cylinder with a large diameter should be among the top priorities when choosing a washer-extractor. The large diameter provides the lift and drop action necessary to clean hard-to-launder items. When comparing machines, compare actual cylinder dimensions and specific cubic foot volumes.

Also, look for microprocessor controls which give a greater range of processing choices as well as more accurate control over how goods are processed. The preprogrammed formulas in MILNOR machines were developed specifically for the needs of healthcare facilities. They are not common-denominator formulas. The formulas differ in number, type, time and temperature of baths, as well as supply injection. By pushing a button, these formulas can be adjusted for either permanent press or all-cotton fabrics. The machines are available in 25 to 160 lb. capacities.

## 3. Heavy duty construction

Rugged construction -- from top quality materials -- is imperative if you expect long-term service. Check competitive brands to see if their construction stands up to MILNOR specifications. Compare spec literature. There can be a big difference in quality.

MILNOR machines stand apart from others with features like:

- large, tapered roller bearings and a triple shaft seal to shield the bearings from water
- the exclusive use of continuous, rather than spot, welding for greater strength and reliability
- the simplicity and dependability of heavy duty, single-speed motors
- pre-extract load balancing speed to reduce vibration and extend machine life, and
- a console constructed of heavy gauge materials



## The Long Island Home: Two Facilities with One Goal

By: Katie Pellerin

Since 1882, The Long Island Home, a not-for-profit organization operating South Oaks Hospital, a comprehensive behavioral health continuum and Broadlawn Manor Nursing & Rehabilitation Center, a comprehensive long term and sub-acute care continuum have been a

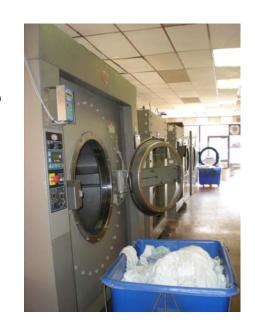


vital part of the healthcare in the Long Island community. Their operating mission is



"We Care for People", which strives to provide the very best in healthcare and customer satisfaction, in all areas of service delivery. A key area in customer satisfaction at The Long Island Home for their nearly 500 daily patients, residents' families, and staff is laundry.

For over 30 years, Milnor washer-extractors and dryers have played a role in securing a healthy environment for their residents and patients to heal and to thrive. Milnor's gentle processing and durable laundry machinery are efficient, sanitary, clean, and fresh. With properly cleaned bed linens and personal clothing, residents are able to focus on getting and staying well.



The installed laundry equipment is: one 48040 F7J suspended open-pocket washer-extractor (275 lb. capacity), two 42032 X7J washer-extractors (165 lb. capacity each), one 30022 V6J rigid mount washer-extractor (60 lb. capacity), and three M170



gas dryers (170 lb. capacity each). Also, the laundry boasts eight Milnor M3131 stack dryers and one M50SL steam dryer used for the residents' personal clothing.

The laundry staff includes eight full-time employees daily, who process the property's various healthcare linens using the four Milnor washers and three Milnor dryers in 35-40 loads

per day.

Direct Machinery, Long Island Home's authorized full-line Milnor distributor, sold and installed the facility's new equipment. Direct Machinery's President Ron Hirsch announced, "The Long Island Home had Milnor washers from 1978 that provided excellent service for almost 30 years! Their great experience with these durable machines had a major influence in their once again purchasing the Milnor washer-extractors."

For more information on Milnor machinery or to find out your authorized Milnor distributor, please email <a href="milnorinfo@milnor.com">milnor.com</a> or call 504-712-7656.



## **WASHER-EXTRACTOR CAPACITIES**

	Weight	MILNOR	MILNOR	MILNOR	MILNOR						
	In	25 lb.	35 lb.	40 lb.	45 lb.	60 lb.	80 lb.	100 lb.	140 lb.	160 lb.	275 lb.
	Lbs.	models	models	model	model						
King sheets <sup>S</sup>	2	13	18	20	23	30	40	50	70	80	138
Queen sheets <sup>S</sup>	1.9	13	18	21	24	32	42	53	74	84	145
Double sheets <sup>S</sup>	1.8	14	20	23	26	34	46	57	80	91	157
Twin sheets <sup>S</sup>	1.3	20	28	32	36	48	64	80	112	128	220
Pillow cases <sup>S</sup>	0.3	100	140	160	180	240	320	400	560	640	1100
Pillow cases <sup>L</sup>	0.3	96	135	154	173	231	308	385	538	615	1058
Bed Spreads (Double)	3.5	7	10	11	13	17	23	29	40	46	79
Duvet Covers (Double)	3.7	7	9	11	12	16	22	27	38	43	74
Duvet Covers (Queen)	3.9	6	9	10	12	15	21	26	36	41	71
Duvet Covers (King)	4.4	6	8	9	10	14	18	23	32	36	63
Blankets	2.2	11	16	18	20	27	36	45	64	73	125
Bed pads	2.8	9	13	15	16	22	29	36	51	58	100
Pillows	1.6	16	22	25	28	38	51	63	89	101	174
Bath towels <sup>S</sup>	0.4	63	88	100	113	150	132	250	350	400	688
Bath towels <sup>p</sup>	0.5	46	65	74	83	111	200	185	259	296	509
Hand towels <sup>S</sup>	0.2	139	194	222	250	333	148	556	778	889	1528
Hand towels <sup>P</sup>	0.2	167	233	267	300	400	444	667	933	1067	1833
Wash cloths <sup>S</sup>	0.1	417	583	667	750	1000	533	1667	2333	2667	4583
Wash cloths <sup>P</sup>	0.1	250	350	400	450	600	1333	1000	1400	1600	2750
Bath mats	0.5	50	70	80	90	120	160	200	280	320	550
Table cloths (54x54)	0.7	34	48	55	62	82	110	137	192	219	377
Table cloths (72X 72)	1.2	22	30	35	39	52	70	87	122	139	239

S=Standard L=Luxury P=Plush, extra thick

These figures are based on sample items. Weights and sizes of some brands differ, and therefore the figures should be used only as guidelines

## HIGH SPEEDS CAN DAMAGE FIREFIGHTER TURNOUT GEAR

By: Darrell Redler, Pellerin Milnor Corporation

Whether it's a commercial laundry facility or an on premises laundry (OPL), a common concern is production. How many pounds of laundry per hour or per day will the equipment process? The rationale for quick turnaround is apparent in a commercial facility or in a large hospital or hotel. Similarly, in a fire station with an established policy for cleaning turnout gear in accordance with the latest guidelines (National Fire Protection Association Bulletin 1851, Chapter 5), of primary concern is how quickly the cleaned gear can be returned to service. As this article will show, the quickest turnaround is not necessarily what is best for the garment in terms of functionality and longevity.



First, consider the washing process in a commercial quality front-loading washer-extractor. Milnor machines, like all machines of this kind utilize water and a lift-and drop action (as opposed to agitation used in top-loading machines) as recommended by NFPA 1851 and reinforced by the FEMSA (Fire and Emergency Manufacturers and Services Association) pamphlet on protective ensembles for structural firefighting. (Both publications emphasize the importance of using machines dedicated to cleaning turnout gear as opposed to washing at home or using a commercial launderer not set up to

handle firefighting gear specifically.)

After the garments or inner linings are cleaned and rinsed, the washerextractor will go into its extract cycle. Regarding water extraction, it is important to know what the effects are on the materials that make up the typical ensemble. During the laundering process, water circulates in and around the outer shells and inner linings. It is recommended that these be washed separately, unless the protective inner lining is sewn into the shell, to avoid cross contamination. One of the problems that can arise is associated with the moisture barrier. These moisture barriers are of two main varieties: a Teflon-type and a polyurethanecoated mesh as made by various companies for use in protective clothing. When turnout gear is subjected to high-speed extraction, water is violently pulled from the goods. Since the moisture barrier is by necessity waterproof, water must pass either around or through the barrier. Water is often trapped within the folds of the gear during the wash process. This results in small microbursts of the fabric that leads to premature moisture barrier failure when using excessively high extract speeds. This effect will also be evidenced by the premature deterioration of the reflective striping (safety striping, name, number, etc.) on the gear. This can lead to increased maintenance cost, premature gear retirement, or worse still, increased risk to the firefighter.

Damage to inner liners from excessive G-forces exerted in the final extraction step of the wash cycle was the reason for the 100 G extraction limit

specification in NFPA 1851. Milnor washer-extractors like the 30015 T5X and 30022 T5X with Gear Guardian® formulas are ideal for cleaning turnout gear because the extract speeds minimize wear and tear. Another valuable feature is that Gear Guardian formulas suspend basket motion during water refills to avoid tumbling the gear, unless the water level is satisfied. This reduces undue wear on the fabric, enhancing its longevity even further. The higher extract machines such as the 30015 V7J or 30022 V6J with Gear Guardian formulas can also be used for cleaning turnout gear as long as the extract rates are set according to the garment being laundered in accordance with the manufacturer's instructions. (Please consult the Gear Guardian brochure for a comparison of the Milnor washer-extractors offered with the Gear Guardian concept of ten preprogrammed wash formulas for the goods most commonly found in a fire station.) Naturally, the dryer the goods are when the leaving the washer-extractor, the shorter the dry time will be. Milnor machines, like all washer-extractors, remove water centrifugally so goods can be dried in a short amount of time. However, shorter dry times should not come at the expense of excess wear. Beware, then, of competitors' claims of faster dry times due to their high extraction rates. Remember: The most important factor in choosing a washer-extractor should be what is best for the turnout gear itself.

This brings us to drying methods, which is mentioned here as a conclusion to the subject of turnaround time for turnout gear. Please consult the specific



drying instructions from the gear supplier for guidance on drying since many gear suppliers prohibit tumble drying due to the potential for damage to various elements of the ensemble. Milnor solves this problem by offering an all-stainless steel drying cabinet in two size capacities: the 40"-wide model for up to 3 sets of gear; and the 61"-wide model for up to 6 sets. The Milnor drying cabinet uses directed hot airflow (instead of the mechanical action of a tumble dryer) to quickly return the clean gear to useful service (typically in about one hour). Otherwise, simple hang-drying (perhaps aided by a ventilation fan) also works, but takes more time.

In conclusion, Milnor Gear Guardian washer-extractors and cabinet dryers are the ideal choice for use in fire stations. The preprogrammed formulas and controls design make them simple to use, and their rugged construction ensures many years of dependable service. The lift-and-drop wash action and NFPA 1851-compliant extract speeds of the Milnor Gear Guardian washer-extractor help to maximize the service life and protective attributes of turnout gear.

Pellerin Milnor Corporation
P. O. Box 400, Kenner, LA 70063
Phone: (504) 712-7656 Fax: (504) 468-3094
milnorinfo@milnor.com



## FIREFIGHTER HEALTH & SAFETY

By DARRELL REDLER

## Rugged Turnout Gear Requires Delicate Care

R irefighter turnouts can withstand the effects of a burning building, yet a simple home washer can render them useless.

The improper cleaning action of a top-loading home-style washer is brutal to turnouts. The agitator in

most home machines harshly abrades the material while other parts of the bulky gear receive little or no washing action – vital for proper cleaning. This is just one of the many concerns to keep in mind when planning how to properly clean turnout gear and keep it in the best condition.

Efficiently cleaning and decontaminating firefighter gear can be done at either an on-premises laundry (OPL) at the firehouse or by working with a gear-cleaning service that specializes in handling firefighter turnouts. Either way, washing processes should follow the recommendations of the National Fire Protection Association (NFPA) 1851 Standard and guidelines from the Fire and Emergency Manufacturers and Services Association (FEMSA) pamphlet on protective ensembles for structural firefighting. (Both publications emphasize the importance of using a gear-cleaning specialist or machines dedicated to cleaning turnout gear as opposed to washing at home. NFPA 1851 also prohibits cleaning at a public laundry unless that facility has an area dedicated to turnout gear, as well as cleaning by a dry cleaner.)

Properly cleaned turnout gear will last longer because the various components of the gear – shell, moisture barrier and temperature barrier – will be cleaned without damage to the goods. Proper cleaning also makes the gear safer to wear because carcinogenic soot and tars have been removed from the turnouts.

Darrell Redler is a market specialist for Milnor Laundry Systems. Turnout gear cleaning should take place in a front-loading, industrial washer-extractor, with lift-andtumble washing action. This type of washing action causes the gear to interact with the water (and wash chemicals) and releases soil. In a

Properly
cleaned
turnout gear
lasts longer
and is safer
to wear.
home appliance, an agitator provides some mechanical action, but a commercial/industrial machine imparts complete mechanical action by lifting and gently tumbling the garments

in the washing solution. Lifting is aided by "ribs" placed along the wall of the rotating wash cylinder.

Provided you have the correct type of formulas and the correct chemicals, efficient cleaning and decontamination of gear can be done at the same time. A variety of cleaning and disinfecting chemicals are available through many firehouse supply companies. Also, check with your turnout gear manufacturer. NFPA 1851 provides guidelines on these chemicals.

One process that many fire stations have chosen is to designate a specific individual to ensure that turnout gear – whether laundered in-house or by an outside cleaner – is handled properly. A compliance officer can monitor the tracking of these goods to determine that they are properly cleaned after each use and that they are cleaned on a regular basis – regardless of whether or not they have been used.

Another concern to keep in mind regarding turnout gear cleaning is the extraction speed – or spin cycle – at which moisture is removed from the goods. After the garments or inner linings are cleaned and rinsed, the washer-extractor will go into its extract cycle. Extraction removes most of the water in preparation for drying.

Because turnouts are typically made of materials that shed water easily—unlike cotton towels, for example—they do not require high extraction speeds. In fact, some garment makers prefer lower extraction speeds to avoid harm to the turnouts. It is important to keep in mind what type of items you plan to wash most frequently, and judge extraction speeds on this basis.

One problem that can arise is associated with cleaning the moisture barrier. These moisture barriers are of two main varieties: a Teflon fabric or a polyurethane-coated mesh. (It is recommended that these be washed separately, unless the protective inner lining is sewn into the shell, to avoid cross contamination.)

During the laundering process, water circulates in and around the outer shells and inner linings. When turnout gear is subjected to high-speed extraction, water is violently pulled from the goods. Since the moisture barrier is by necessity waterproof, water must pass either around or through the barrier. Water is often trapped within the folds of the gear during the wash process. This results in small microbursts of the fabric that leads to premature moisture barrier failure when using excessively high extract speeds. This effect will also be evidenced by the premature deterioration of the reflective striping (safety striping, name, number, etc.) on the gear. This can lead to increased maintenance cost, premature gear retirement, or worse still, increased risk to the firefighter.

Consideration should also be given to drying turnout gear. A variety of devices and methods are available to fire departments. The best course of action, including the washing of turnout gear, is to always consult the manufacturer's specific cleaning and drying instructions.





# GEAR GUARDIAN® WASHER-EXTRACTOR CAPACITIES

	MILNOR	MILNOR	MILNOR	MILNOR	MILNOR	MILNOR
	25 lb.	40 lb.	60 lb.	80 lb.	100 lb.	140 lb.
	models	models	models	models	models	models
No. of sets of gear *	1	2 to 3	4 to 5	6 to 7	8 to 9	11 to 13

<sup>\*</sup>These figures are based on sample items. Weights and sizes of some brands differ, and therefore the figures should be used only as guidelines

# GEAR GUARDIAN™ DRYING CABINET CAPACITIES

FC-3 FC-6
Drying cabinet Drying cabinet
No. of sets of gear 3 6

These figures are based on **complete** sets of turnout gear, including bib, jacket, boots, hat liner, and gloves. Stainless steel racks and insertion tubes optional.

## PELLERIN MILNOR CORPORATION

P.O. Box 400, Kenner, LA 70063-0400
Phone: 504-712-7656 Fax: 504-468-3094
<a href="mailto:www.milnor.com">www.milnor.com</a>
E-mail: milnorinfo@milnor.com

## PulseFlow® Technology takes the Crown in Columbia, MS

When Crown Health Care opened its fourth laundry, in Columbia, Mississippi, Pellerin Milnor provided a comprehensive service including plant design, machine supply and installation, start-up and training. The project was the first in the Crown group to install PulseFlow Technology tunnel washers



MAINTAINING HIGH STANDARDS: Rick Hamlin, Crown Health Care's chief operating officer (left), is seen here with Scott McClure of **Pellerin Laundry Machinery** 

Hamlin said that ever since his company first worked with Pellerin and Milnor they have helped Crown to maintain quality standards for its customers. The project in Columbia was "seamless"

ounded in 1955, Crown Health Care Laundry Services is an independent full-service healthcare laundry processor and linen rental company with headquarters in Pensacola, Florida. The company has a long history of using Pellerin Milnor and Chicago Dryer equipment in its laundries and when it needed to equip its fourth plant, located in Columbia, Mississippi, Pellerin Laundry Machinery Sales Company was the obvious choice.

As the authorized sales and service provider for Pellerin Milnor, ADC, Energenics, E-Tech, and Chicago Dryer, the company not only equipped the laundry but also designed the layout, co-ordinated equipment delivery, installation, rigging and assembly and organised start-up and training.

Don Haferkamp, Crown's CEO said: "Our mission is to provide health care linen and laundry services to customers that demand quality and cost control through the best possible use of linen. Crown is more than a supplier and forms long-lasting partnerships with customers by providing exceptional support and integrity.

"We chose to partner again with the Pellerin team and its vendors because they understand the importance of customer service and support for all four of our laundries. The recent addition of our 85,000ft2 laundry in Columbia allows us to serve our customers more efficiently."

The Columbia laundry is the first in the group to install Milnor's PulseFlow® Technology tunnel washers.

WATCHFUL EYE: With camera feeds to photo-eye sensors on the discharge conveyors, the MultiTrac system can watch out for the risk of work queues building and take action

The two Milnor 76039 10-module tunnels are capable of providing in excess of 4,536kg (10,000lb) of clean healthcare linen per hour and Rick Hamlin, Crown's chief operating officer, said that the PulseFlow® tunnels achieve a water consumption of less than 4.5litre/kg (0.5gal/lb) throughout the plant. He added that Crown is very satisfied with the quality and performance of the PulseFlow tunnel system.

The Columbia laundry began processing linen in May 2014. Hamlin pointed out that the workflow is crucial to the design of any laundry. Milnor was able to create a continuous workflow by integrating E-Tech rails to transport linen throughout the production lines.

After extraction in the two MP1656 56bar single-stage presses, the work is automatically taken by the E-Tech press-to-dryer rail system to the next available storage belt





HIGH VOLUMES: Two 10-module PBW tunnels process over 4,536kg/hour

between any of the pairs of Milnor 6464 dryers. Then a discharge belt takes the load to a clean-side rail which will transport it to the next production stage. As soon as the dryer's discharge door closes, its load door will open so the next linen batch can be loaded in seconds. This dryer pod configuration minimises the time it takes for washed work to be delivered to the finishing area.

The Milnor dryers feature a significant innovation -GreenFlex™ (automatic energy mode), which dynamically modifies the airflow to reduce fuel consumption at off-peak times. GreenFlex can switch the dryers to a more energyefficient mode when longer drying times are needed but if the  $MultiTrac^{TM}$  system identifies a risk of a queue forming it will automatically switch off GreenFlex. In this way the plant can reduce energy use without compromising the workflow or drying quality.

The whole laundry is equipped with touchscreen controls and batches are tracked, and the data saved, throughout the production lines. The Mentor® Controls for each CBW have embedded video of the load chute while the MultiTrac System Control has camera feeds to all photo-eye sensors on the discharge conveyors. All batches are completely traceable, viewable, and recorded on the MilMetrix® Dashboard.

The boiler room is equipped with a Kemco heat-exchanger, boiler stack economiser and condensate return vent condenser. This system captures heat (energy) from the pit water, condensate return and boiler stack and uses it to



PRESS-TO-DRYER TRANSPORT: The E-Tech rail system is seen here delivering washed and extracted linen to the dryers

produce tempered and hot water for the washer-extractors and the PBW $^{\text{TM}}$  tunnels.

Labour is the highest cost in most laundries. Crown and Pellerin designed the Columbia plant to be completely automated from the E-Tech sorting system, through delivery to the tunnels and dryers, and then to the Chicago sheet separators and feeders. In most cases operators are only involved at three points in the production line.

The Columbia, Mississippi laundry currently operates one shift and delivers clean linen to its customers six days a week.

Rick Hamlin said: "Pellerin and Milnor stand behind their product. Ever since the Quitman, Georgia plant, the level of service we received from Pellerin has helped us maintain standards for our customers. The Columbia laundry was a seamless project thanks to Pellerin."

"Our goal is to offer a consultative, proficient approach throughout the design-build process," said Scott McClure, vice-president of sales for the Pellerin Laundry Machinery Sales Company. "We have a long-lasting relationship with Crown because of our mutual understanding of the importance of customer service and support,"he added.

For over 50 years, Crown Health Care Laundry Services has remained a top quality linen and service provider in Florida, Georgia, Alabama, Mississippi, Louisiana and South Carolina. Opening the Columbia laundry has allowed Crown Health Care to offer a more efficient service for its customers in Mississippi and Louisiana.

## Meet Milnor in Milan at Expo Detergo

Milnor International, Pellerin Milnor's European arm, will be exhibiting a range of developments on its stand at Expo Detergo (V29/Z30 Hall 4). Thierry Lambermont (pictured right), who was recently appointed managing director, will be on hand to discuss the machines including the MWF-Series of suspended washer-extractors and the 48040 tilting washer, a robust machine with 125kg (250lb) capacity, which is joining the F-Series. Both are available with the E-P Plus® or MilTouch™ controls.

The MWF-Series is the latest product innovation to result from the recent Milnor/CSM joint venture partnership. The MWF-Series is ideal for commercial and OPL businesses as the machines give excellent wash quality, can be programmed to suit requirements and have a soft-mount frame. They are available in 27kg (60lb), 45kg (100lb), 63kg (140lb) and 77kg (170lb) capacities.

The stand will also feature an eight-module 68kg (150lb) capacity 76039 PBW™ and laundry owners can find out more about how they can have a seamless PBW project like Crown Health Care.







## A1 Services & Pellerin Milnor: Family Businesses Grow Together

A1 Services of Jefferson, LA employed automation in their recent equipment/building renovation to streamline product flow and increase productivity. A1 Services is a mat and dust control rental company that has been servicing Louisiana and Mississippi customers since 1970. Privately owned and operated by the Bode family, A1 takes pride in providing excellent customer service with quality products at competitive prices.



A1 Services utilizes Milnor Automated Continuous Batch Washer (CBW<sup>®</sup>) Systems to process 11,000 – 12,000 mats per week. A1 purchased their first Milnor CBW in March 1993 and their second system in May 1995. When it was time to replace their 16-year-old Milnor CBW washer, the Bode family once again chose Milnor.

The latest expansion consisted of: a Milnor 4 Compartment CONWA04 Loading/Weighing Conveyor, a four-module 76039 CBW tunnel washer, a 700 RPM M7V4836C high speed centrifugal extractor, two Milnor double batch 64058 gas pass-through dryers, and approximately 250 feet of Milnor conveyors.



A1's third Milnor CBW System is vital to overall operations and efficiency because it permits the 248 feet of conveyors to link the wash room to the assembly/distribution warehouse, with minimal labor.

Max Schroeder, A1's Operations Manager, said, "The plant used to run forklifts to transport palletized mats





all day long between the buildings. Now this task is performed automatically with the use of Milnor takeaway conveyors. This has reduced our operation time by 25%. Also, by properly laying out the new system's loading conveyor, one operator can now load both systems. This task took two operators before the renovation."

Howard and Darrell Bode chose Milnor because of the equipment's durability and washing capability. Darrell stated that "the Milnor CBW processes mats better and faster than their open pocket washers, using only cold water and little wash chemistry."

Schroeder added, "The machine's superior mechanical action enables us to achieve unparalleled production rates." All three men know a great deal about Milnor tunnels, especially Max who previously provided maintenance on two Milnor 12-module tunnels at another laundry. To further improve production rates, Schroeder commissioned custom carts for unloading and sorting off the conveyor. Working with Flexion cart



manufacturers, Max designed these varnished wooden carts to expedite the clean mats' distribution.

The new Milnor tunnel system processes rubber mats every 2:30 minutes, standard mats every 3:05 minutes, and large mats every 4:05 minutes.



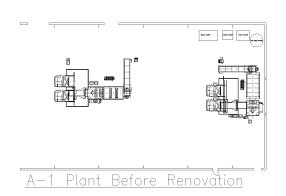
By using Milnor CBW Systems and streamlining their production, A1's operations labor costs only contribute to roughly 8-9% of their total operating costs. "This allows us to produce *quality* products at very competitive prices" says Howard Bode.

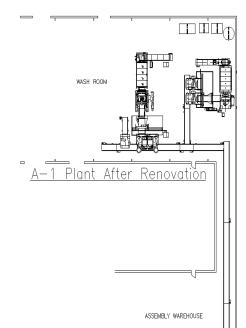
A1 delivers to over 500 business daily and services over 4,000 valued customers across the Gulf South and Central Louisiana. "The Pellerin family and Bode family have grown





together through the years", says Curtis Pellerin (President and Owner of Pellerin Laundry Machinery Sales Company, Inc.). "Both Milnor and A1 have multiple generations of family members working within their organizations. We look forward to working together as we grow our respective companies."







## **Pellerin Milnor Corporation**

P.O. Box 400, Kenner, Louisiana 70063 (504) 712-7656 • Fax: (504) 468-3094 www.milnor.com • E-mail: milnorinfo@milnor.com



## RENTAL WASHER-EXTRACTOR CAPACITIES

	Weight In Lbs.	MILNOR 25 lb. models	MILNOR 35 lb. models	MILNOR 40 lb. models	MILNOR 45 lb. models	MILNOR 60 lb. models	MILNOR 80 lb. models	MILNOR 100 lb. models	MILNOR 140 lb. models	MILNOR 160 lb. models	MILNOR 275 lb. models
Table cloths (54x54)	0.7	34	48	55	62	82	110	137	192	219	377
Table cloths (72X 72)	1.2	22	30	35	39	52	70	87	122	139	239
Napkins (20x20)	0.12	208	292	333	375	500	667	833	1167	1333	2292
Dress (Uniforms) Jackets	0.7	36	50	57	64	86	114	143	200	229	393
(attendants)	0.75	33	47	53	60	80	107	133	187	213	367
Aprons (bib)	0.4	63	88	100	113	150	200	250	350	400	688
Aprons (tea)	0.2	125	175	200	225	300	400	500	700	800	1375
Pants	1.15	22	30	35	39	52	70	87	122	139	239
Shirts	0.5	50	70	80	90	120	160	200	280	320	550
Draperies (84x96)	5.91	4	6	7	8	10	14	17	24	27	47
Entry mats (36x60)	7.99	3	4	5	6	8	10	13	18	20	34
Furniture covers	2.08	12	17	19	22	29	38	48	67	77	132
Cleaning rags	0.11	227	318	364	409	545	727	909	1273	1455	2500
Mop heads 12"	0.5	50	70	80	90	120	160	200	280	320	550
Mop heads 24" Continuous	1.1	23	32	36	41	55	73	91	127	145	250
towels 40-50 yd (100% cotton) Continuous towels 40-50 yd	4.4	6	8	9	10	14	18	23	32	36	63
(50% poly)	3.75	7	9	11	12	16	21	27	37	43	73

These figures are based on sample items. Weights and sizes of some brands differ, and therefore the figures should be used only as guidelines

## Renovation improves atmosphere in prison laundry

Renovating a laundry is expected to bring improvements. Increasing productivity, reducing energy consumption, and improving conditions are the name of the game when planners set about to upgrade a laundry.

However, for Central State Laundry at Manning Correctional Institution in Columbia, SC, the laundry renovation had additional ramifications. The addition of some new equipment had a positive effect on the inmates and the laundry's total work program.

As one of the 12 self-supporting enterprises or industries within the South Carolina Department of Corrections, the central laundry supplies almost 5 million pounds of linen annually to three hospitals within the state's Department of Mental Health and to several institutions in the Department of Corrections. Ray Smith, director of laundry services, reports that the laundry just signed a new contract with the Department of Mental Health, which accounts for about 85% of the plant's production.

Clean linen is produced by about 90 inmates between the ages of 17 and 23, while about 20 more inmates work in supportive roles, such as maintenance. The laundry also has seven civilian employees—six supervisors and Smith.

"Because of their ages, most of the inmates have never held a steady job and haven't known the basics of going to work in the morning," Smith explains. The first thing we want to show them with this program is how working here is like working in the outside world, and how the training and work experience they get can be used to their advantage when they're released. Here, in the laundry, we can teach them something."

The laundry operates as a business, paying its own operating expenses and salaries by establishing and maintaining

during the next few years, it may even seek work from outside sources, Smith adds. "Our goal isn't just to keep the guys busy, it's to run the laundry like an outside business with trained employees, and to save the state money by supplying a service below the normal rate."

When the laundry was originally built, it had a capacity of about 10 million pounds a year, but over the years, a combination of administrative and mechanical neglect had allowed the equipment to run down and created a negative atmosphere in the laundry. "When I got here two years ago, the tension in the air was so great you could cut it with a knife," Smith says.

One of Smith's first steps to correct this situation was to restructure the duties of the civilian supervisors to a more hands-on approach of management. He also created an inmate council, call the "Floorwalkers Association", which is made up of inmates with good work records. They serve somewhat like lead men in various areas of the laundry.

According to Smith, the installation of new equipment provided a somewhat unexpected response from inmates last fall. "It had the biggest positive result I've seen," he says. "Inmates saw that this wasn't cheap equipment, but it was the best. Sure, we might have saved money on other equipment, but it wouldn't have been worth it. I believe they saw how serious we are about the laundry, and they consequently take care of the equipment because of its value. Before, they didn't care if or why equipment was down."

Working the laundry is not mandatory and is, in fact, somewhat competitive since it pays the highest rate in the state's Division of Industries--\$16.75 every two weeks. "That may not sound like a lot of money, but it is in this situation", he says.

"The first thing we establish with new workers during orientation is that it's a nononsense operation. This discipline is followed by equipment training and with other tangible training such as bringing in outside speakers. Also, our Floorwalkers Association is a positive incentive to employees since its members are inmates who have worked themselves up within the system and have supervisory positions of responsibility. Once inmates see there is something to learn and gain, they see that things are different here and attitudes change," Smith notes.

Not only did the addition of some new equipment make the laundry more positive program in the 500-inmate facility, but also the installation provided an unexpected plus. One worker, an inmate who had been trained there as an electrician did such an outstanding job that the company that handled the installation offered him a job. He has worked with them since his parole last March.

"This, more than anything we could have verbalized, has stuck in the minds of the inmates—that this young man had come into the system with no sense of directions and left with a job offer in his hand. This caused inmates to realize that if they do the work and continue to make positive steps, they too can find jobs," Smith reports.

The start of the renovation program also drastically improved quality and opened the door to an expansion of production. "With the renovation, out capacity is actually 7.5 million pounds annually. Our goal is to expand services within both the mental health and correction areas of the state. We want all of their business, and why shouldn't we? We have a fantastic operation and a good product to offer," Smith says.

Currently the laundry handles only linen and the denim-type work clothes issued by the Department of Corrections. The first phase of the renovation program included the installation of four 700 lb. washer-extractors, two 450 lb. steam heated dryers, and a steam

tunnel. The laundry retained two of its old 1200 lb. washers, a 300 lb washer, four extractors, several older dryers and six 8-roll steam ironers. Smith hopes to replace most of the older equipment during the next three to four years. "The first order of business has been to get back on track in a plant that had been built and equipped in 1962. The rest of the renovation hinges on our ability to attract more business due to our quality."

The equipment also has reduced water consumption by two-thirds. The laundry can load to the maximum weight and still produce the quality level that Smith has set. Also, "we've shortened our cycle time by at least 25%."

"Keep in mind that we are not running new linen. The replacement program is not anything like you'd see for a regular operating hospital that charges \$150 a day for a room," he notes. "What we now have is the ability of maintaining older low-tensile linen to the point that it's very acceptable."

Not all facilities served by the laundry are located near the plant. In fact, two of the institutions are in downtown Columbia. To service them, the laundry has its own fleet of trucks. Deliveries are made by two tractor-trailers, an 18 ft. truck, or a van. These vehicles are driven by inmates who are usually nearing the end of their sentence and have reached a level of trustee, Smith explains. Also, many of these drivers have received their training through one of the prison's facilities, so they also have gained some skill that could help them later.

Smith adds that the entire laundry operation is usually supervised by one of two guards. They are there primarily to breakup fights and watch for drug smuggling. However, these problems have declined drastically as the working conditions have improved. For example, Smith reports that when he took over the plant, it was not unusual to have one or two fights per week.

Now, there has not been a fight in the laundry in more than six months.

Smith contends that this is due primarily to the improved working conditions, which makes the laundry a place where the inmates want to work and don't want to endanger that position. Although the turnover is still high—about 140% to 160%-- much of this is due to reassignment to other facilities and, of course, attaining parole or the end of their term.

"If more automated equipment is purchased, we would simply have to shift people to other areas, such as sorting. Because of the prison setting and the fact that we must remain labor-intensive to offer as much training to as many inmates as possible, we need additional poundage if the rest of the laundry is to be brought to today's standards," Smith notes. The first stage of the renovation is helping him achieve this goal, and is apparently having the desired results in the inmate retraining program.



## **Pellerin Milnor Corporation**

P.O. Box 400, Kenner, Louisiana 70063 (504) 712-7656 • Fax: (504) 468-3094

www.milnor.com • E-mail: milnorinfo@milnor.com

/11294



## CORRECTIONAL WASHER-EXTRACTOR CAPACITIES

	weight	MILNOR	MILNOR	MILNOR	MILNOR						
	in	25 lb.	35 lb.	40 lb.	45 lb.	60 lb.	80 lb.	100 lb.	140 lb.	160 lb.	275 lb.
	lbs.	models	models	models	models						
Bed sheets (single)	1.43	17	24	28	31	42	56	70	98	112	192
Pillow covers	0.23	109	152	174	196	261	348	435	609	696	1196
Blankets	2.33	11	15	17	19	37	34	43	60	69	118
Bed pads	1.62	15	22	25	28	43	49	62	86	99	170
Pillows	1.4	18	25	29	32	43	57	71	100	114	196
Bath towels	0.45	56	78	89	100	133	178	222	311	356	611
Hand towels	0.19	132	184	211	237	316	421	526	737	842	1447
Wash cloths	0.06	417	583	667	750	1000	1333	1667	2333	2667	4583
Pants	1.01	25	35	40	45	59	79	99	139	158	272
Shirts	0.49	51	71	82	92	122	163	204	286	327	561
Entry mats (36x30)	0.57	44	61	70	79	105	140	175	246	281	482
Cleaning rags	0.16	156	219	250	281	375	500	625	875	1000	1719
Mop heads 12"	0.5	50	70	80	90	120	160	200	280	320	550
Mop heads 24"	1.1	23	32	36	41	55	73	91	127	145	250

These figures are based on sample items. Weights and sizes of some brands differ, and therefore the figures should be used only as guidelines

PELLERIN MILNOR CORPORATION, P.O. Box 400, Kenner, LA 70063-0400 Phone: 504-712-7656 Fax: 504-468-3094

http://www.milnor.com E-mail: milnorinfo@milnor.com

## MORE INFORMATION FOR ARCHITECT LAUNDRY PLANNING



**MWR-Series** 



V-Series with E-P Plus® control



**T-Series** 



Rigid Mount with MilTouch™ control



**X-Series** 



EcoDry 30-75 lb. Dryers



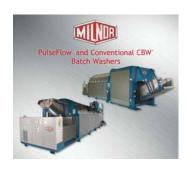
**M30-175 Dryers** 



**Divided-Cylinders** 



**Centrifugal Extractors** 



**PulseFlow® Tunnels** 



**Single Stage Press** 



**Pass-Through Dryers** 

For more information, visit <a href="https://www.milnor.com/brochures">www.milnor.com/brochures</a>