

Standard Belt Materials Properties



It's all about performance...hot or cold, wet or dry, light or heavy

Experienced Sparks Dura-Lock technical experts will provide innovative application assistance customized to your specific needs.

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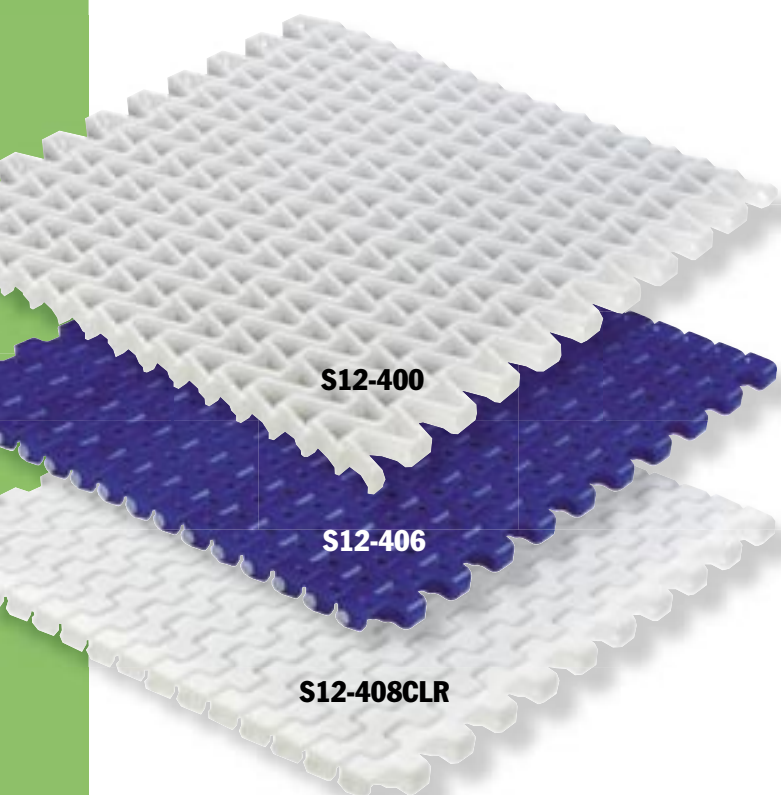
Polyethylene (PE) is the most lightweight and flexible of the modular belt materials. Superior product release, good chemical resistance, water buoyancy, and high impact strength are all characteristics of PE belts. A broad temperature range, -100°F (-73°C) to 150°F (66°C), makes this an ideal choice for seafood and dairy processing applications. FDA approved and USDA accepted.

Polypropylene (PP) is ideal for applications that require high chemical resistance. PP is the belt of choice for higher temperature applications with a temperature range from 41°F (5°C) to 212°F (100°C). It is ideal for bakery, meat, and poultry processing applications. FDA approved and USDA accepted.

Polyacetal (POM) is the strongest of the belting materials. Heavier, with high tensile strength, POM is the longest lasting and most durable. This belt is well suited to heavier food processing, packaging, container, and industrial applications. The temperature range is from -45°F (-43°C) to 203°F (95°C). FDA approved and USDA accepted.

Special Belt Materials

Special belt compounds are available to enhance a wide range of belt properties such as diffusing static electricity build up, preventing freezing, increasing heat resistance, and increasing or reducing friction. Let a Sparks Dura-Lock technical expert provide you with the innovative solution you require.



**For a tight fit and a small nose bar...
the Sparks "Minipitch" Series
of 1/2" (12mm) pitch belts**

applications

Cooling belt for bakery applications

The **S12-400** is an open (40%) belt with a slightly curved surface. Use this belt with small nose bars down to .55" (14mm).

Use as a cooling or drainage belt

The **S12-408** is partially open (8%). An excellent choice for light duty transportation. Use this belt with small nose bars down to .55" (14mm).

Sturdy enough for bakeries, dairies, and food processing

The **S12-408** has a flat top and a closed surface.

Keep it clean and moving...Sparks 1" (25mm) pitch belts have the durability to hold up after repeated high pressure washings

The technical experts at Sparks have the experience to match you with the belt that has the qualities you are looking for in a modular belt. Let them answer your concerns about cleaning, draining, chemical resistance, extreme temperature variations, release properties, and transporting on inclines.

Cooling or freezing belt for seafood, red meat, and vegetables

The **S25-400** is open with a smooth surface for versatility.

Package goods on an inclined conveyor

The **S25-400F** has a friction surface.

Small products like pasta and noodles that require drainage

The **S25-406** has a perforated flat-top surface with an open area of 13%.

Transport smaller industrial components or use as a cooling belt in the rubber industry

The **S25-408** is a closed flat-top belt.

Used for fish, vegetables, and boiling applications

The **S25-411** is an open top belt with a curved, net-like surface.

An ideal choice for medium-heavy duty fish, meat, vegetable, and other food processing

The **S25-412** is an open top belt with small, net-like top flights.

Bottles, glass, pharmaceutical products, and small industrial components

The **S25-420** has raised ribs for use with finger transfer plates.

Easy to clean, a great choice for snacks, berries, fruits, red meat, and trimming lines

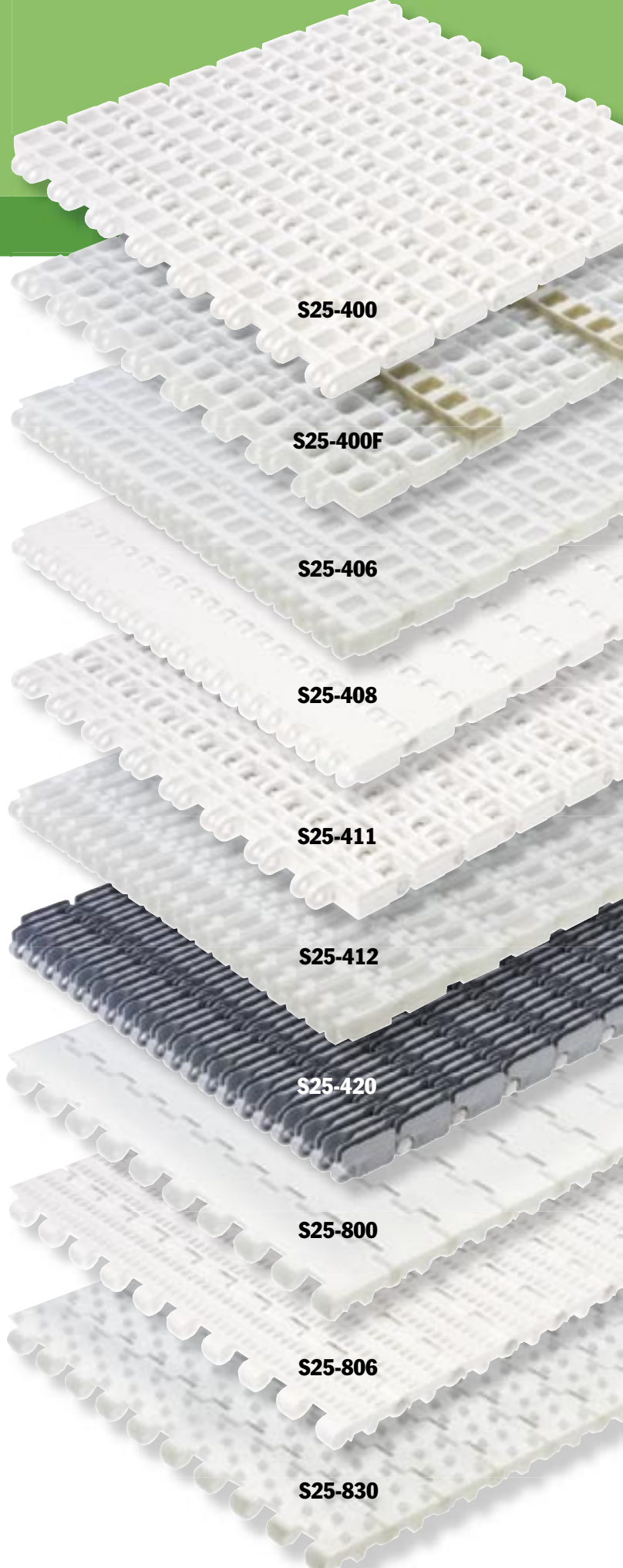
The **S25-800** is a closed flat-top belt. The smooth surface and back make this belt highly cleanable.

Products that require light drainage

The **S25-806** is a perforated flat-top belt. The smooth surface and back make this belt highly cleanable.

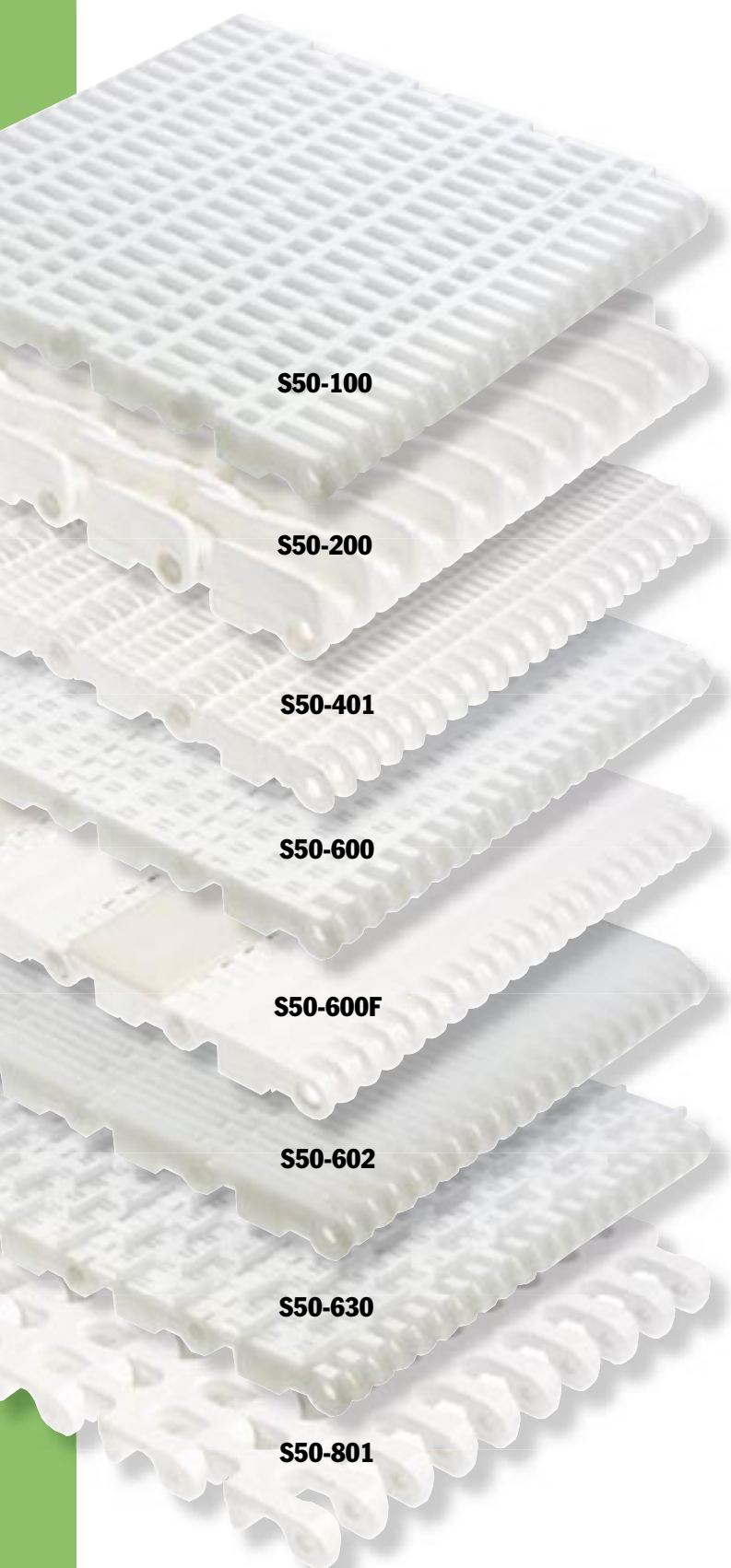
A terrific choice for seafood, red meat, and vegetable transportation

The **S25-830** is a closed top belt with small cones on the surface structure.



Endurance

Tough, Rugged, Reliable.



The muscle and adaptability to make your move to market...rugged Sparks 2" (50mm) pitch Dura-Lock gets the job done

Down time is expensive and is so unnecessary in belting maintenance. That's why maximum service life from your tough-duty belt is an obsession at Sparks. If you need grip, strength and endurance in a belt, then Sparks has a solution tailored to reduce cost and increase productivity.

applications

For heavy duty loads like wood, glass, raw materials, seafood, meat, poultry, and vegetables

The **S50-100** is an open belt with a smooth surface.

This 2" belt is rugged enough for bottling, canning, brewing, and the tire industry

The **S50-200** surface features raised ribs for use with finger transfer plates.

The largest (61%) open surface is ideal for cooling and freezing

The **S50-401** has the largest (61%) open surface. Use for food processing where large air flow is required in a small open area.

Great for products that require drainage like pickles, corn, snacks, and sweets

The **S50-600** has a perforated, flat top.

The belt of choice for moving goods on an inclined conveyor

The **S50-600F** has a closed top with a friction surface.

Food products that do not need drainage

The **S50-602** has a closed, flat top with small ribs on the surface. An excellent choice for food processing and other industries that do not require drainage.

Food processing applications that require little drainage holes and small flight effect

The **S50-630** has a perforated, flat top with small surface flights.

Medium to heavy-duty food and raw material processing applications that need a large open top

The **S50-801** is an open top belt with a smooth surface.

Great utility belt for dairy, vegetable, poultry, and bakery applications that require small drainage

The **S50-806** is an open top belt with a smooth surface.

Easy to clean, ideal for use in meat, poultry, and fish trimming lines

The **S50-808** is closed, flat top belt.

Rugged construction and grip, great for seafood red meat, and vegetable processors

The **S50-830** has a closed top with small cones on the surface.

Rugged, heavy-duty, used as an assembly belt for automotive production lines when some drainage is required

The **S50-906** is a perforated, flat top belt.

Strongest modular belt available, for assembly lines, pallets, and loading systems

The **S50-908** closed, flat top belt.

Ideal belt for heavy-duty applications when assembly personnel will be walking on the belt

The **S50-938** is a closed belt with a molded, non-skid pattern.

Strongest belt in a narrow version

The **S50-9088** is the narrow version of the **S50-908** with the same closed top.

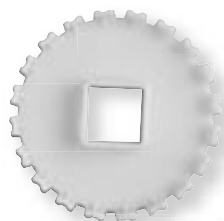
Easy customization for difficult applications... accessories to fine-tune your belt transportation system for maximum efficiency at minimal cost

It's all about creative and custom belt solutions. The technical experts at Sparks have all the tools they need to design the optimum custom belt installation for your application. These include a large selection of flight designs in numerous dimensions, a choice of side guard sizes, friction modules, finger transfer plates, and wear strips.

Flights are available in standard straight, bent, round top, comb, and supported in sizes ranging from 1" (25mm) to 6" (150mm) depending upon belt size.

Molded side guard retaining plates are available for the 1" (25mm) and 2" (50mm) belts.

Sturdy, molded drive sprockets are available with either round or square bore. Each size has multiple tooth configurations for drive efficiency and wide shoulders for maximum belt support.



Belting Specifications



Bakery	Food Handling	Meat Poultry	Light Duty	Heavy Duty	Type	Nominal Pitch	Belt Surface	Open Area %	Accessories	PE	Color PP	POM
■			■		S12-400	½" (12.5mm)	Open, smooth	40%	—	N	W,G	B
■			■		S12-406	½" (12.5mm)	Perforated flat top	8%	—	N	W,G	B
■			■		S12-408	½" (12.5mm)	Closed flat top	Closed	—	N	W,G	B
■	■	■	■		S25-400	1" (25mm)	Open, smooth	29%	Flights, side guards	N	W,G	B
			■		S25-400F	1" (25mm)	Friction surface	29%	Flights, side guards	N	W,G	—
■	■	■	■		S25-406	1" (25mm)	Perforated flat top	13%	Flights, side guards	N	W,G	B
			■		S25-408	1" (25mm)	Closed flat top	Closed	Flights, side guards	N	W,G	B
■	■	■	■		S25-411	1" (25mm)	Open net curved	26%	Flights, side guards	N	W,G	B
■	■	■	■		S25-412	1" (25mm)	Open net w/.10" flights	13%	Flights, side guards	N	W,G	B
		■		■	S25-420	1" (25mm)	Raised ribs-drained	14%	Finger transfer plates	N	W,G	B
■	■	■	■		S25-800	1" (25mm)	Closed flat top	Closed	Flights, side guards	N	W,G	B
■	■	■	■		S25-806	1" (25mm)	Perforated flat top	17%	Flights, side guards	N	W,G	B
	■	■	■		S25-830	1" (25mm)	Structure w/.12" cones	Closed	Flights, side guards	N	W,G	B
■	■	■	■	■	S50-100	2" (50mm)	Open, smooth	27%	Flights, side guards	N	W,G	B
		■		■	S50-200	2" (50mm)	Raised ribs-drained	27%	Finger transfer plates	N	W,G	B
■	■	■	■	■	S50-401	2" (50mm)	Open, smooth	61%	Flights, side guards	N	W,G	B
■	■	■	■	■	S50-600	2" (50mm)	Perforated flat top	9%	Flights, side guards	N	W,G	B
	■	■	■	■	S50-600F	2" (50mm)	Closed friction surface	Closed	Flights, side guards	N	W,G	—
	■	■	■	■	S50-602	2" (50mm)	Closed flat top w/.12" ribs	Closed	Flights, side guards	N	W,G	B
■	■	■	■	■	S50-606	2" (50mm)	Perforated flat top	10%	Flights, side guards	N	W,G	B
■	■	■	■	■	S50-608	2" (50mm)	Closed flat top	Closed	Flights, side guards	N	W,G	B
	■	■	■	■	S50-630	2" (50mm)	Perforated flat top w/.12" flights	9%	Flights, side guards	N	W,G	B
	■	■	■	■	S50-801	2" (50mm)	Open, smooth	24%	Flights, side guards	N	W,G	B
	■	■	■	■	S50-806	2" (50mm)	Open, smooth	20%	Flights, side guards	N	W,G	B
■	■	■	■	■	S50-808	2" (50mm)	Closed flat top	Closed	Flights, side guards	N	W,G	B
	■	■	■	■	S50-830	2" (50mm)	Structure w/.12" cones	Closed	Flights, side guards	N	W,G	B
		■		■	S50-906	2" (50mm)	Perforated flat top	13%	Flight	—	G	G
				■	S50-908	2" (50mm)	Closed flat top	Closed	Flight	—	G	G
				■	S50-930	2" (50mm)	Perforated flat top w/.12" flights	13%	Flight	—	G	G
				■	S50-938	2" (50mm)	Closed w/.12" non skid pattern	Closed	Flight	—	G	G
				■	S50-9088	2" (50mm)	Closed flat top	Closed	Flight	—	G	G



Applications

Belt Pull PE lb/ft kg/m		Belt Pull PP lb/ft kg/m		Belt Pull POM lb/ft kg/m		Belt Wt PE lb/ft kg/m		Belt Wt PP lb/ft kg/m		Belt Wt POM lb/ft kg/m		FDA Approval	USDA Accepted
300	450	395	590	495	740	0.76	3.7	0.76	3.7	1.13	5.5	■	■
300	450	395	590	495	740	0.76	3.7	0.76	3.7	1.13	5.5	■	■
300	450	395	590	495	740	0.76	3.7	0.76	3.7	1.13	5.5	■	■
420	630	710	1060	1000	1500	1.23	6	1.23	6	1.64	8	■	■
420	630	710	1060	—	—	1.43	7	1.43	7	—	—	■	■
420	630	710	1060	1000	1500	1.23	6	1.23	6	1.64	8	■	
535	800	805	1200	1340	2000	1.23	6	12.3	6	1.64	8	■	
420	630	710	1060	1000	1500	1.23	6	1.23	6	1.64	8	■	■
420	630	710	1060	1000	1500	1.23	6	1.23	6	1.64	8	■	
535	800	805	1200	1340	2000	2.46	12	2.46	12	3.28	16	■	
365	550	435	650	705	1050	0.82	4	0.82	4	1.23	6	■	■
365	550	435	650	705	1050	0.82	4	0.82	4	1.23	6	■	■
365	550	435	650	705	1050	0.82	4	0.82	4	1.23	6	■	
1235	1840	1875	2795	2820	4200	1.64	8	1.64	8	2.46	12	■	
1235	1840	1875	2795	2820	4200	2.25	11	2.25	11	3.28	16	■	
805	1200	1045	1560	1570	2340	1.23	6	1.23	6	1.64	8	■	■
1200	1790	1610	2400	2415	3600	1.43	7	1.43	7	2.25	11	■	■
1200	1790	1610	2400	—	—	1.43	8	1.43	8	—	—	■	■
1200	1790	1610	2400	2415	3600	1.64	8	1.64	8	2.66	13	■	■
1200	1790	1610	2400	2415	3600	1.43	7	1.43	7	2.25	11	■	■
1200	1790	1610	2400	2415	3600	1.43	7	1.43	7	2.25	11	■	■
1200	1790	1610	2400	2415	3600	1.43	7	1.43	7	2.25	11	■	■
805	1200	940	1400	1380	2060	1.64	8	1.64	8	2.46	12	■	■
805	1200	940	1400	1380	2060	1.64	8	1.64	8	2.46	12	■	■
805	1200	940	1400	1380	2060	1.64	8	1.64	8	2.46	12	■	■
805	1200	940	1400	1380	2060	1.64	8	1.64	8	2.46	12	■	■
—	—	min. 4030	min. 6000	min. 4030	min. 6000	—	—	2.87	14	2.87	20	■	
—	—	min. 4030	min. 6000	min. 4030	min. 6000	—	—	2.87	14	2.87	20	■	
—	—	min. 4030	min. 6000	min. 4030	min. 6000	—	—	2.87	14	2.87	20	■	
—	—	min. 4030	min. 6000	min. 4030	min. 6000	—	—	2.87	14	2.87	20	■	
—	—	min. 4030	min. 6000	min. 4030	min. 6000	—	—	2.87	14	2.87	20	■	

