



Proven Pumps for the Asphalt Roofing Industry

Industry/Utility

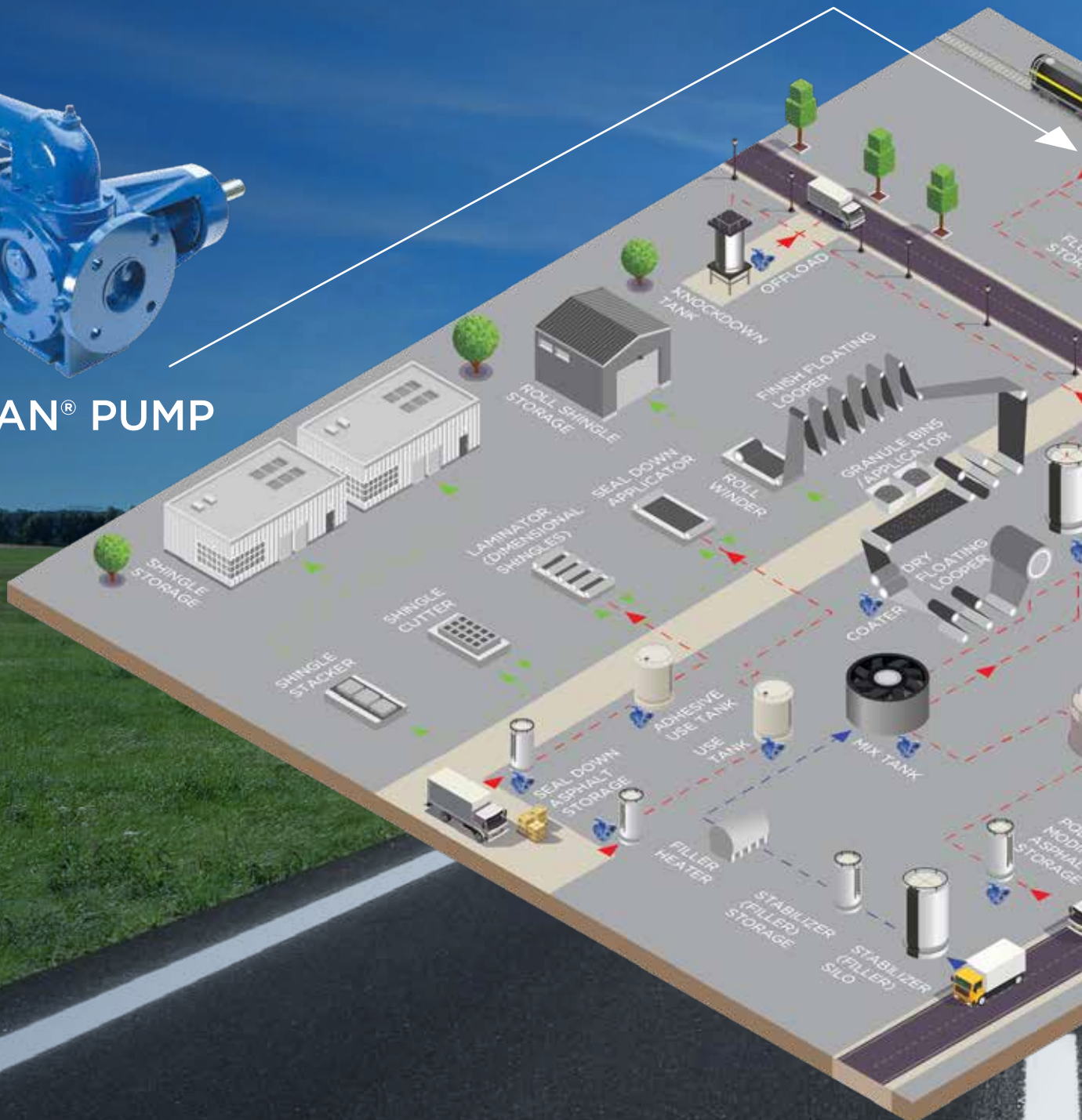
DESMI
Make life flow

Proven Pump Technology

For the Asphalt Roofing Industry



ROTAN® PUMP



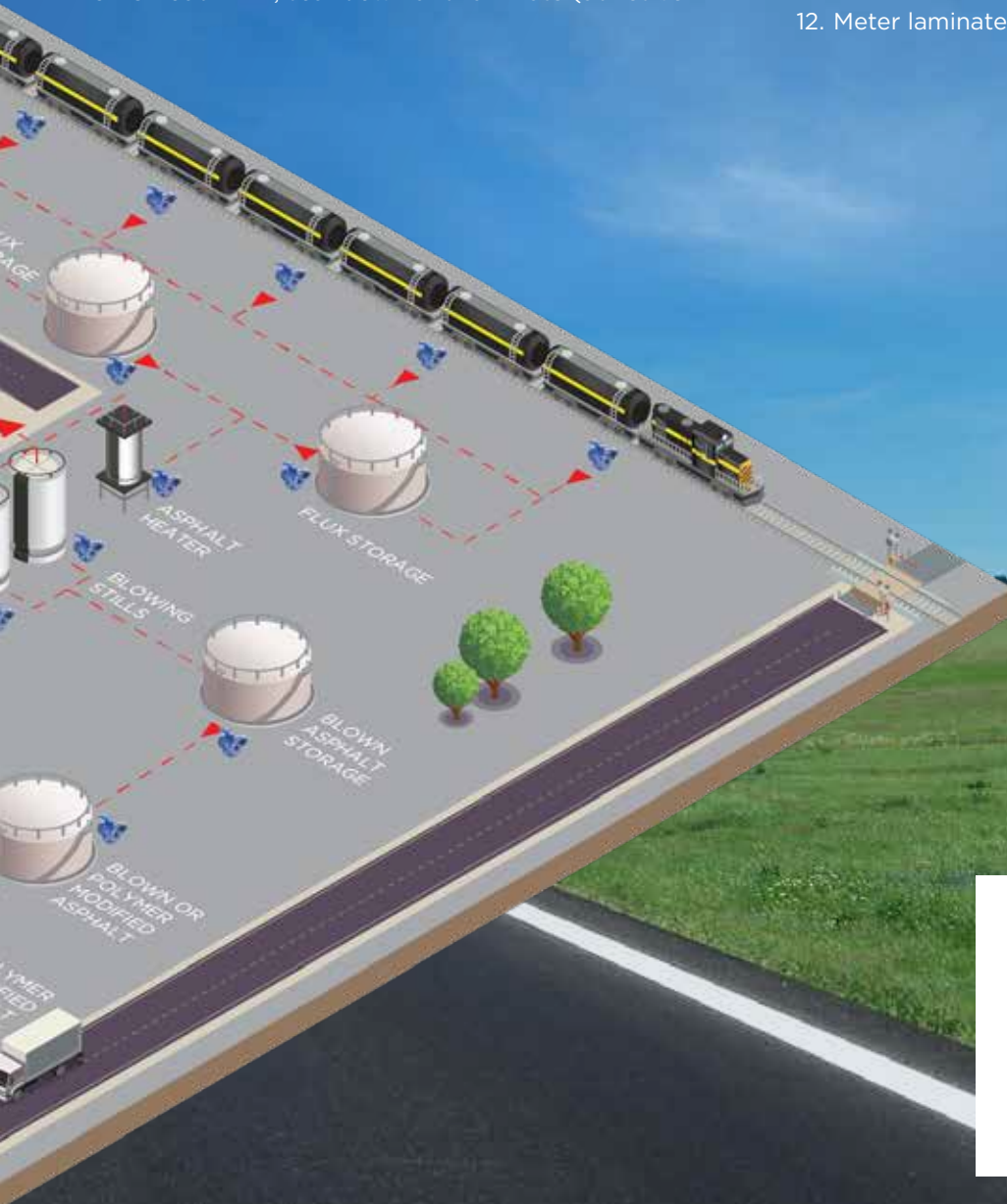
SIMPLIFIED ASPHALT ROOFING PROCESS

Pumps used for:

1. Unload flux from railcars to tank farm
2. Transfer flux from tank farm to pre-heater
3. Transfer flux from preheater to blowing stills
4. Transfer blown (oxidized) asphalt to storage
5. Transfer knockdown tank liquids to disposal
6. Unload PMA, seal-down and laminate (adhesive)

asphalt from trucks to storage

7. Transfer blown asphalt or PMA to plant day tank
8. Transfer from day tank to mix tank for blending with filler
9. Transfer coating asphalt to coater
10. Return coating asphalt to mix tank
11. Meter seal-down onto shingles
12. Meter laminate onto shingles



--- ASPHALT
--- FILLER
--- SHINGLES

DESMI ROTAN® Pumps

Proven Pumps for the Asphalt Roofing Industry

ROTAN delivers the most advanced internal gear design available today, and is dedicated to continued improvement of our already proven pump design. From our oversized

ports for higher viscosity products, to our true back-pull-out modular design, Rotan pumps deliver quality while reducing down time.

HD (HEAVY DUTY)

HD (HEAVY DUTY) CAST IRON PUMPS

(Flow rates up to 250 m³/h / 1100 gpm.) The modular design

of the pump together with the large number of options make it possible to customize the design to your needs.

Capacity Range	Up to 250 m ³ /h / 1100 US gpm
Pressure Range	Up to 16 bar / 232 psi
Viscosity Range	Up to 250,000 cSt
Temperature	Up to 250°C / 482°F

DESMI ROTAN® MAXIMUM RECOMMENDED SPEEDS						
ROTAN® PUMP SIZE	CLEAN ASPHALT			FILLED ASPHALT		
	Max RPM	Nominal Flow Rate		Max RPM	Nominal Flow Rate	
		GPM	M ³ /hr		GPM	M ³ /hr
26	1750	8	1,8	684	3	0,7
33	1750	14	3	622	5	1,1
41	1750	29	6,5	628	10	2,3
51	1450	50	11,4	573	20	4,5
66	1450	82	19	530	30	6,8
81	1150	130	29	450	50	11,3
101	950	220	50	353	105	28
124/6	750	285	65	285	104	24
151	600	395	90	227	145	33
152	550	555	126	195	210	47
201	400	740	169	153	275	62
202	300	1100	263	110	420	95

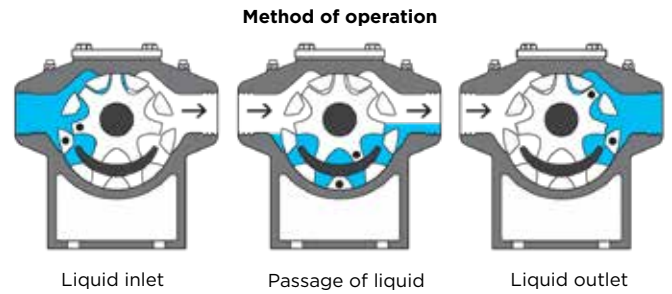
Materials of Construction			
	CLEAN	FILLED <55%	FILLED >55%
Casing	Cast Iron	Cast Iron	Hardened Cast Iron
Idler	Cast Iron	Cast Iron	Hardened Steel
Rotor	Cast Iron	Cast Iron	Hardened Steel
Idler pin	Hardened Steel	Tungsten Carbide	Tungsten Carbide
Bushings	Bronze	Tungsten Carbide	Tungsten Carbide
Shaft	Steel	Tungsten Coated	Tungsten Coated

ROTAN® Leading Features

- Modular Design
- Advance Seal Options
- Abrasive Duty Options
- High Temperature Options
- Heating Jacket Options
- Bi-direction Flow
- Double Relief Valve Options
- Top Mounted Relief Valve
- True Back-pull-out Design
- 90° Casing Options
- Foot Mounted Casing



The ROTAN[®] Internal Gear Pump



SEAL OPTION:



Soft Packing



Behind Rotor Seal



Mechanical Seal



Cartridge Seal



Mag Drive

PUMP MAINTENANCE MADE EASY

ROTAN® pumps are made with a "back pull out" system! This means that a pump, delivered on a base plate, with a spacer coupling, connecting gear or motor to the pump, can be serviced without breaking any pipe connections or moving the motor/gearbox. Just by taking out the spacer in the coupling, you have access to dismount the total rear end of the pump.

ROTAN® Uptime Cartridge can be mounted in a matter of minutes, thus minimizing the downtime and the cost of lost

production. Furthermore you have the advantage that the Cartridge, which has to be serviced, can have new/ serviced components mounted/ repaired without having to pay extra for fast delivery. Alternatively, the complete uptime cartridge can be purchased for both front and rear and kept in stock. When performance is lost the old uptime cartridges can be removed and new ones installed in the existing pump casing. In this way you save money for expensive parts, get less downtime, and loss of production.



UNIQUE OPTIONS:

DRIVE OPTIONS:

- Close Coupled
- Direct Drive
- Reducer Drive
- Belt Drive
- Custom Configurations



Double jacketed relief valve

CASE STORY



ROTAN®- The World's Leading Internal Gear Pumps



90° pumps

North American Leading Asphalt Roofing Company

A leading American roofing shingle manufacturer's corporate "reliability engineer" reached out to DESMI. He was looking for an alternative to the filled asphalt pumps that his company had used for years from another supplier.

He had been going through the factory's equipment to determine which products were the least reliable and costing the most money. He identified their filled asphalt pumps as the most expensive.

It was not only on the purchasing side, but also on the maintenance side since the whole line had to shut down when the pump wasn't running and that happened a lot.

DESMI proposed the proven HD201 ROTAN® asphalt pump, and the client agreed to a demanding trial.

The goal was that if the pump could run for 12 months, then it was a success. In this challenging, abrasive application of pumping asphalt mixed with limestone powder, pumps typically run on variable speed drives.

When first installed, they run at 30-40% speed. As a pump wears performance drops, so the operators speed up the motor to counter the slippage.

They keep speeding it up until at a certain point. It is considered a failure and the pump is replaced. The DESMI HD201B was installed in January 2019, and over one year and a half later, the pump is still operating at original speed.

It is still performing just as it was January 2019 more than a year ago. It has proven to be an exceptionally successful trial.

We exist to keep your business flowing

At DESMI, we work closely with system designers, plant engineers, and other industry stakeholders to deliver critical flow processes for a long list of production tasks at small to large-scale industry sites – even in complex applications with challenging media.

Everything we do is about pushing the boundaries of what we can do for you. Our pump solutions are trusted worldwide for superior performance, unmatched reliability, and high efficiency, and our products are just the start: We build flow solutions around you with the expertise and aftermarket support you need.

Founded in Denmark in 1834, we have provided the solutions our customers need for nearly two centuries. We help you operate more efficiently and reliably, enabling your ambitions for performance, compliance, and growth whilst helping you reduce your climate impact.

Together, we can make a difference, whatever the future holds. Because we, like you, are here to **make life flow**.

For more information, visit desmi.com

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