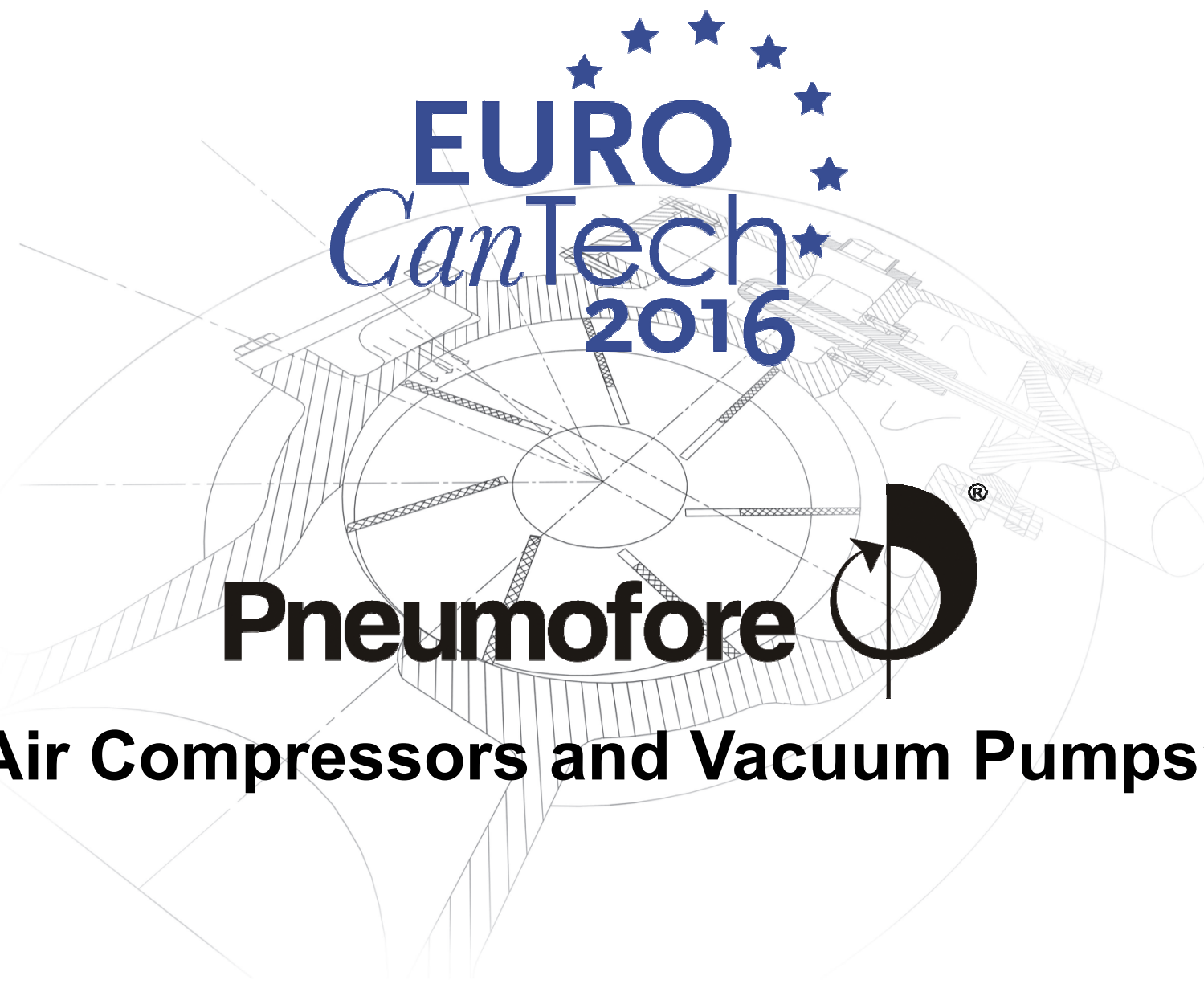




EURO
CanTech
2016

Pneumofore



‘Air Compressors and Vacuum Pumps’

**Rotary Vane Technology
for Air Compressors
and Vacuum Pumps
since 1923**



Basics

- About 50% of the electrical Power Consumption in a Can Factory is for compressed air and vacuum
- A proper Setup of the pneumatic Systems avoids countless Problems in Production
- Most important is the correct Choice of the air compressors and vacuum pumps

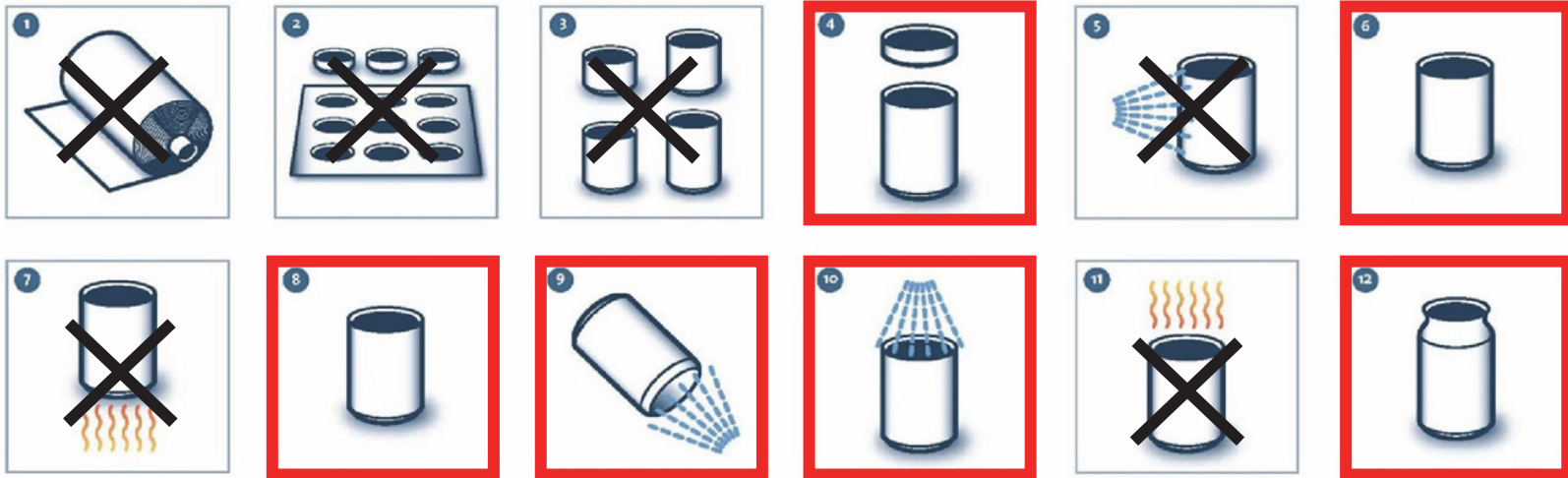
Can Production

Round-the-clock Production 24/7

Sequential Process

Continuous Availability of Vacuum and Compressed Air

One single Process down means all Production is down



- | | | |
|----|-------------------------|---|
| 1 | Coil | Coil of aluminium or steel (raw material for cans) |
| 2 | Cupping press | Stamp discs to be stretched |
| 3 | Wall ironers | The ironing process reduces the thickness of cans |
| 4 | Trimmer | The process removes the irregular edge of cans |
| 5 | Washing | Washing by means of deionised water before coating |
| 6 | External coater | Coating and base colouring of external cans wall |
| 7 | Oven | External drying base colouring of cans wall |
| 8 | Decorator | Decorating of external cans wall with brand design |
| 9 | Rim coater | Vanishing of cans bottom |
| 10 | Internal coating | Coating of internal parts of cans |
| 11 | Internal drying | Drying of internal parts of cans |
| 12 | Necker/Flanger | Reducing and flanging of can neck |

Requirements for pumps and compressors

Durable and reliable

Design for continuous Operation

Easy and fast Maintenance

High Efficiency - low Power Consumption

Reference List - CAN INDUSTRY - Extract

	COUNTRY	PLANT	POWER	m³/h	FIRST PUMP	LAST PUMP
REXAM	AUSTRIA	Ludesch	360 kW	12.960	2007	2008
	CZECH REP.	Dysina	360 kW	12.960	2013	--
	DENMARK	Fredericia	360 kW	12.960	2008	2015
	FINLAND	Mantsala	165 kW	6.480	2012	2014
	INDIA	Mumbai	60 kW	2.216	2012	--
	ITALY	Nogara	355 kW	14.220	1983	2014
		S. Martino	112 kW	4.631	1983	1999
	RUSSIA	Argayash	150 kW	5.400	2007	--
		Naro-Fominsk	112 kW	4.631	1983	1999
	SPAIN	Valdemorillo	360 kW	14.200	1998	2001
CROWN CORK		La Selva	405 kW	14.890	1999	2008
	CH	Widnau	220 kW	8.640	2015	--
	UK	Milton Keynes	88 kW	3.884	1987	1998
		Wakefield	225 kW	8.875	2000	--
	FRANCE	Custines	150 kW	5.400	2014	--
	IRELAND	Athy	90 kW	3.495	2007	--
	SPAIN	Torres de Cotillas	44 kW	1.942	2006	--

	COUNTRY	PLANT	POWER	m³/h	FIRST PUMP	LAST PUMP
CAN PACK	FINLAND	Hameenlinna	96 kW	4.078	2012	--
	INDIA	Aurangabad	96 kW	3.884	2008	2014
	POLAND	Brzesko	198 kW	8.739	2005	--
		Bydgoszcz	66 kW	2.913	2006	--
	ROMANIA	Bucharest	96 kW	4.078	2005	--
	RUSSIA	Rostov	74 kW	3.107	2012	--
		Wolokolamsk	66 kW	2.913	2009	--
	UAE	Dubai	162 kW	7.501	2006	2014
	UK	Scunthorpe	132 kW	5.826	2008	--
	INDONESIA	Bogor	200 kW	5.904	2012	--
UNITED CAN COMPANY		Jakarta	470 kW	14.040	2009	--
		Surabaya	200 kW	5.940	2014	--
	VIETNAM	Ho Chi Minh	200 kW	5.904	2012	--
		Hanoi	200 kW	5.904	2011	--
BALL	NL	Oss	165 kW	6.480	2014	--



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SINCE
1923

SWISS ENGINEERING
ITALIAN DESIGN
GLOBAL PRESENCE

ISO 9001
ISO 14001
CERTIFIED



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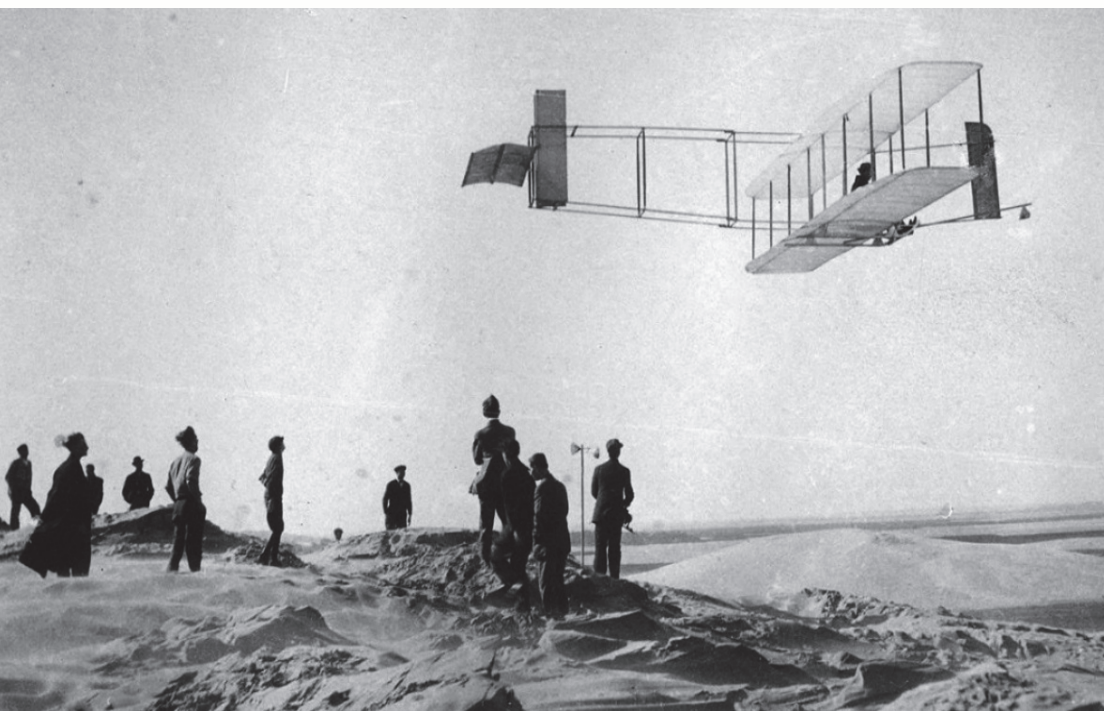
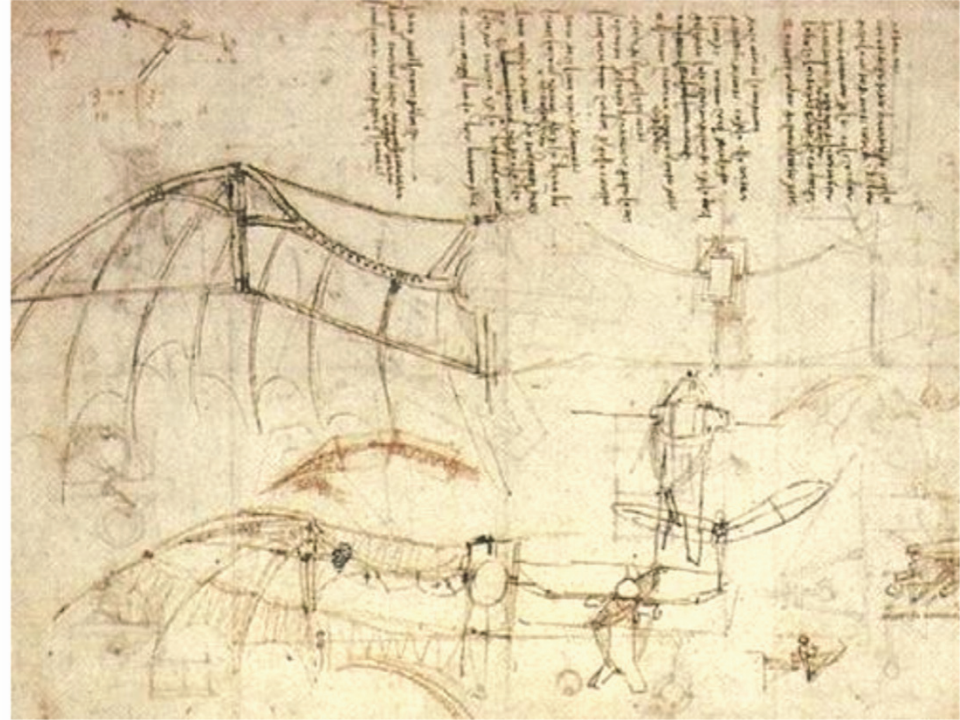
UV

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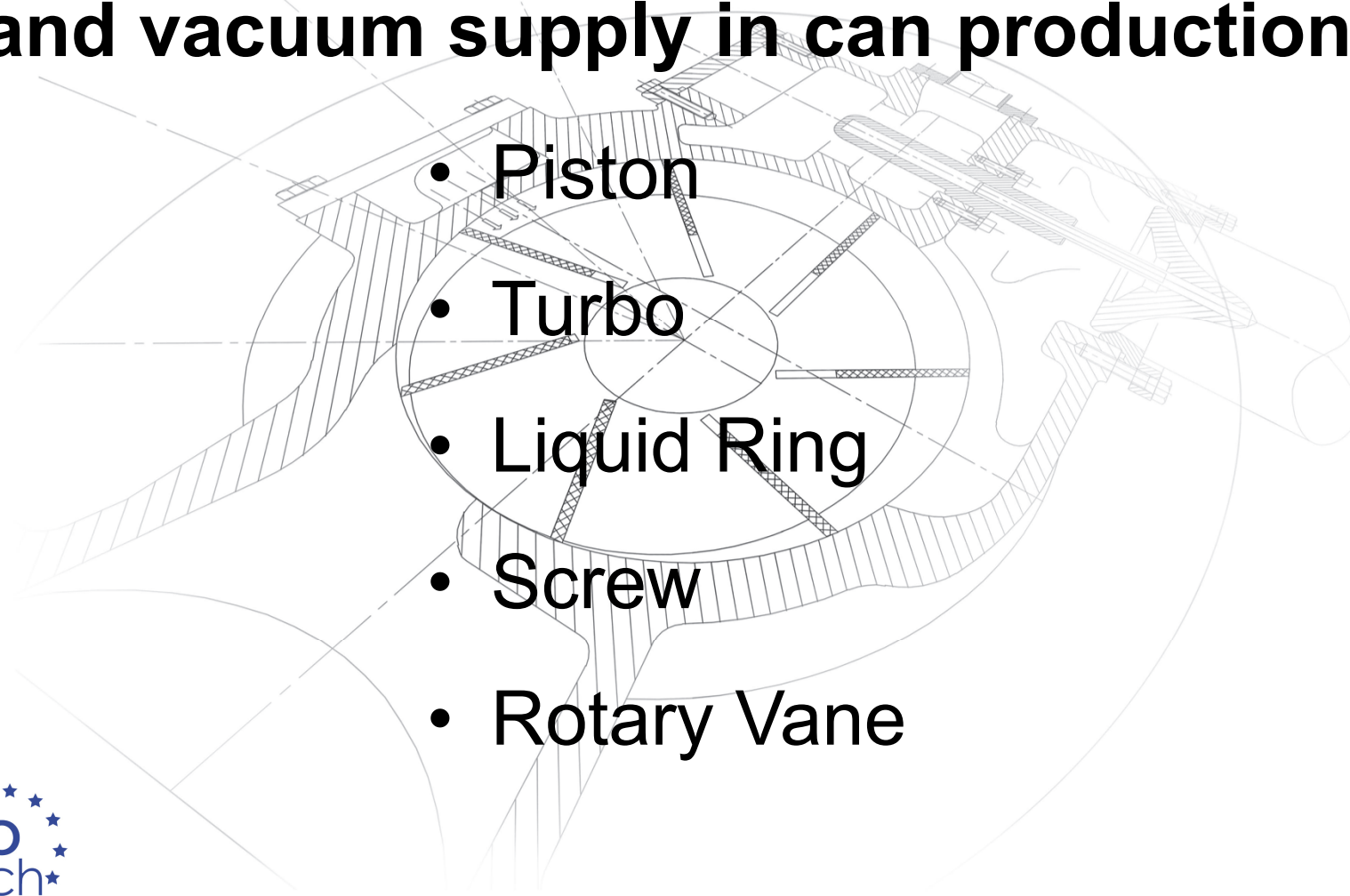
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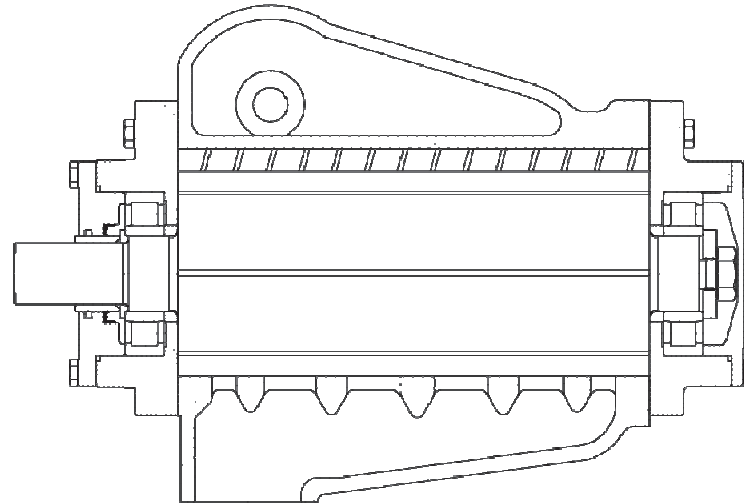
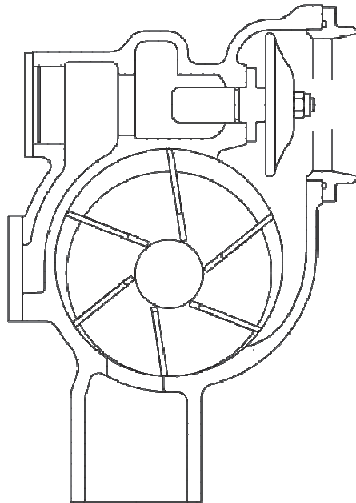
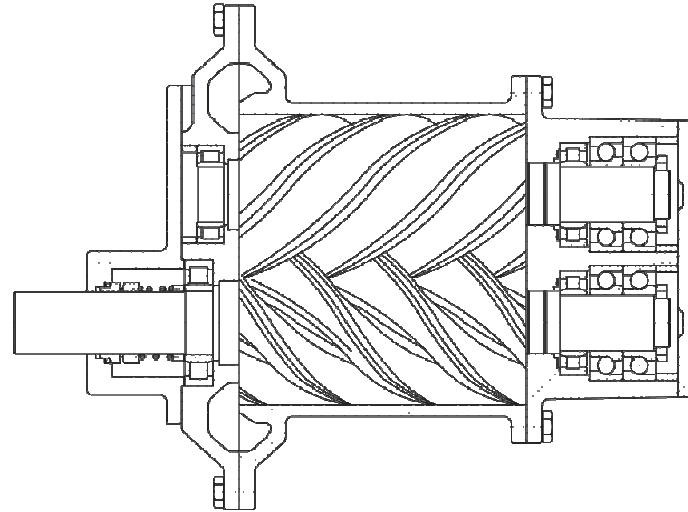
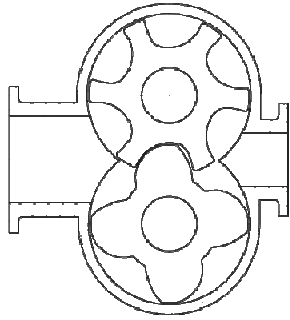
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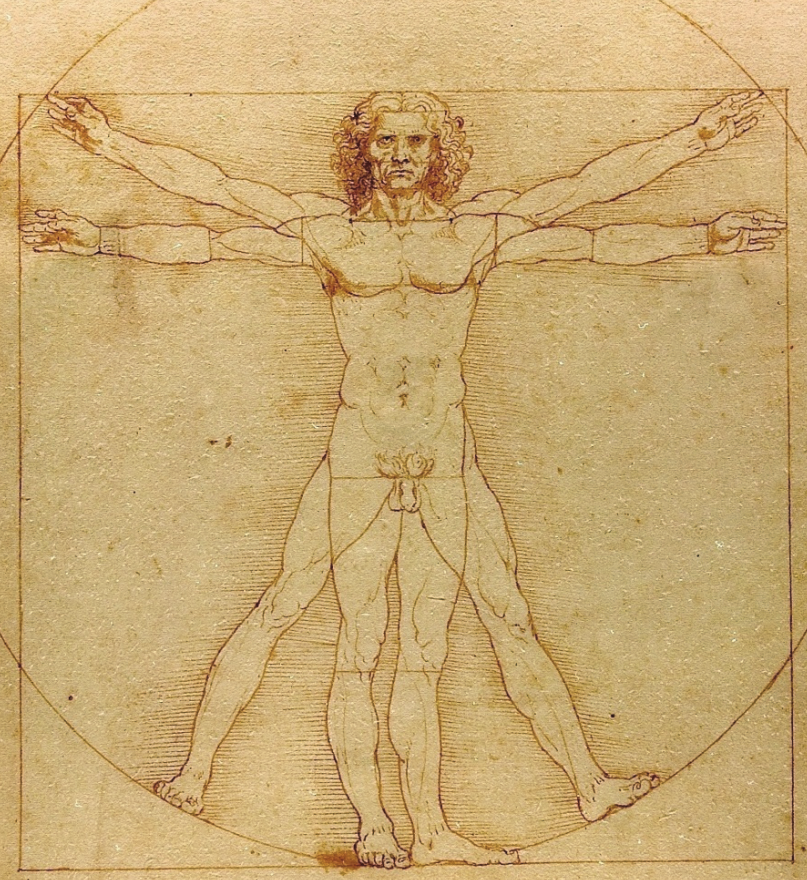


Available technologies for compressed air and vacuum supply in can production

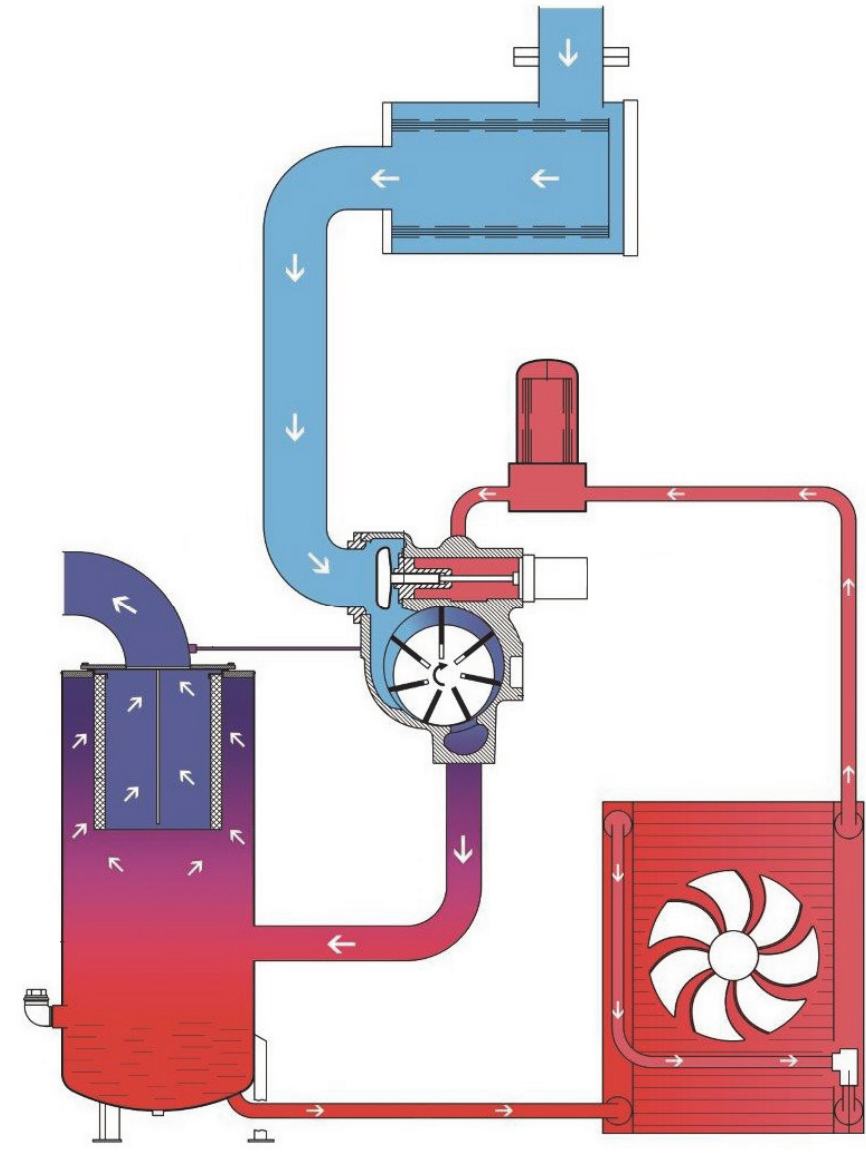
- 
- Piston
 - Turbo
 - Liquid Ring
 - Screw
 - Rotary Vane



Handwritten text in Armenian script, likely a manuscript or a set of instructions related to the diagram below.



Handwritten text in Armenian script, continuing the manuscript or instructions from the top section.



NOSE = AIR FILTER

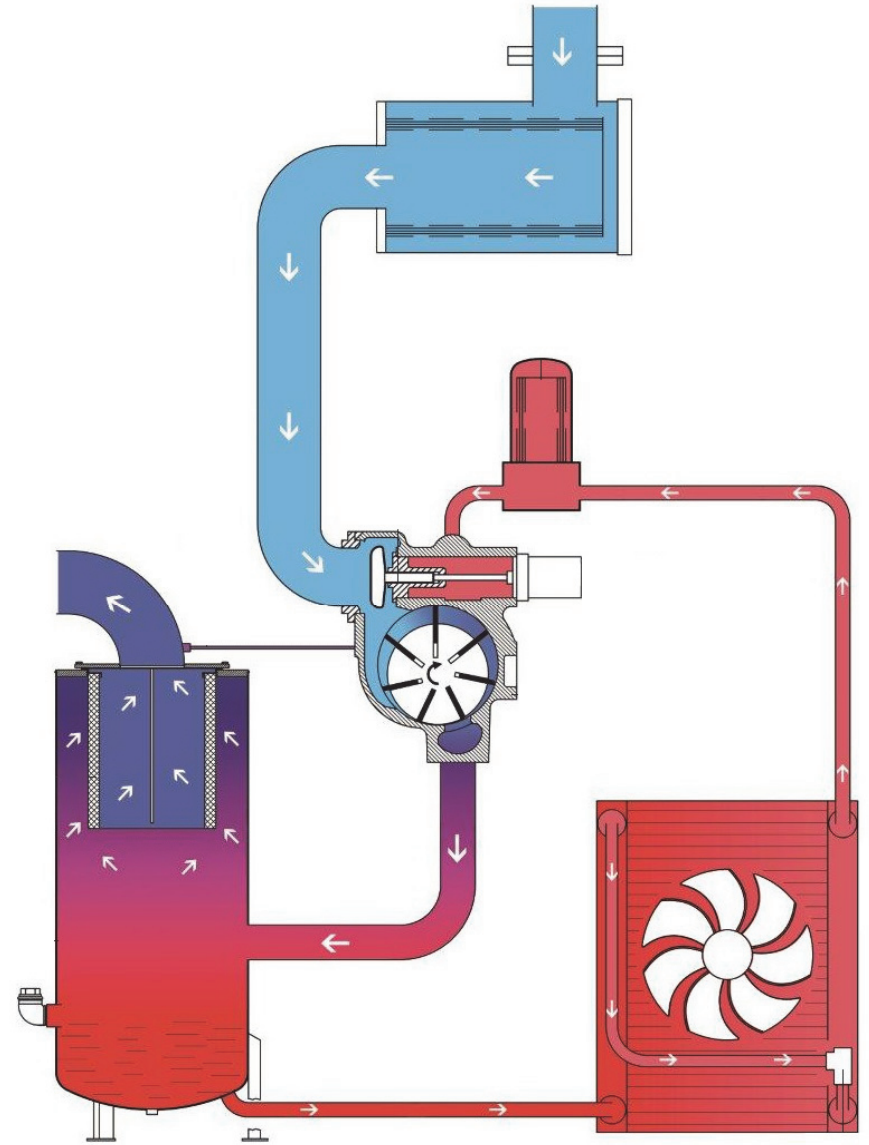
LUNGS = AIR RECEIVER

HEART = AIR END

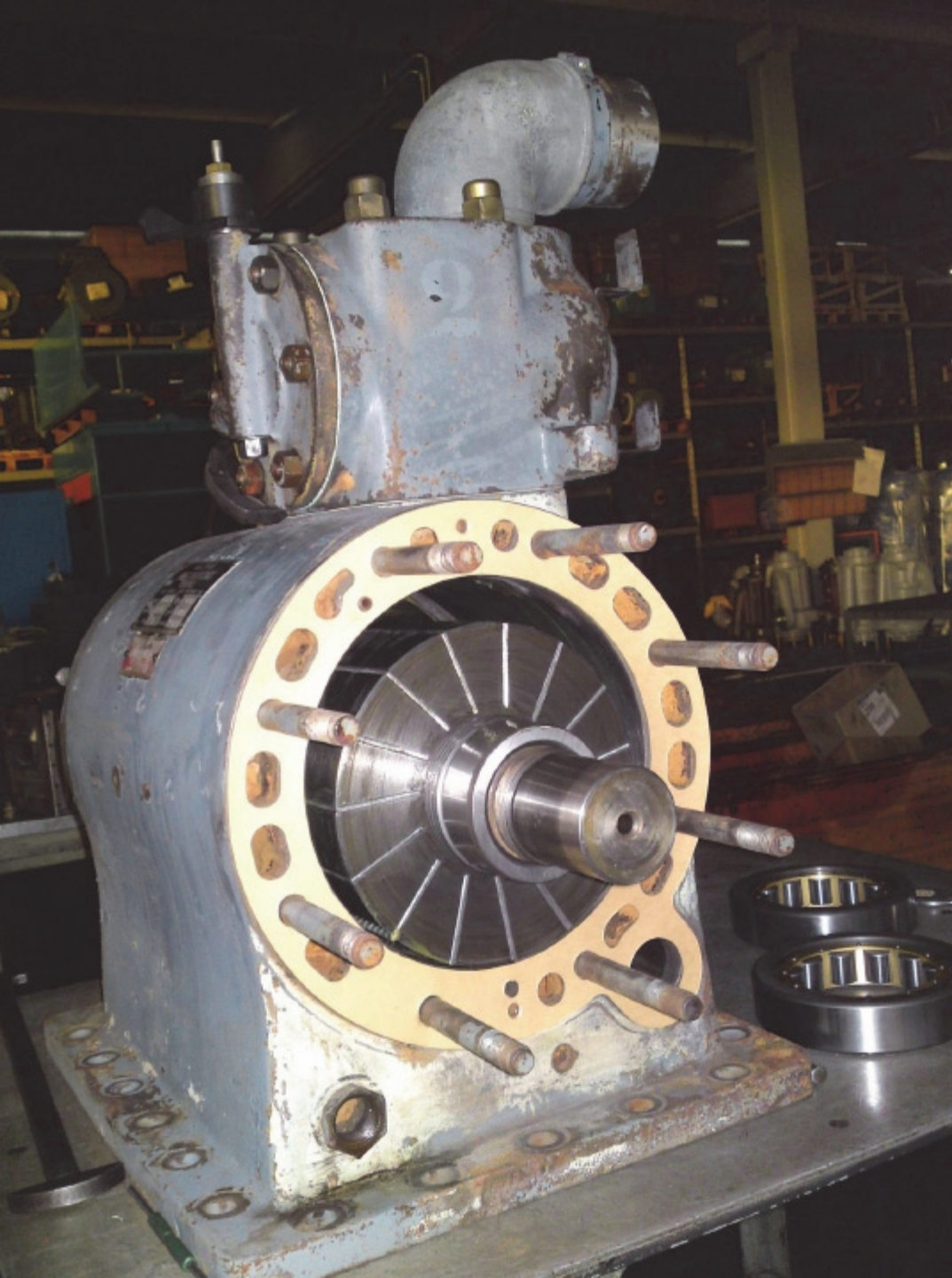
KIDNEYS = OIL FILTER

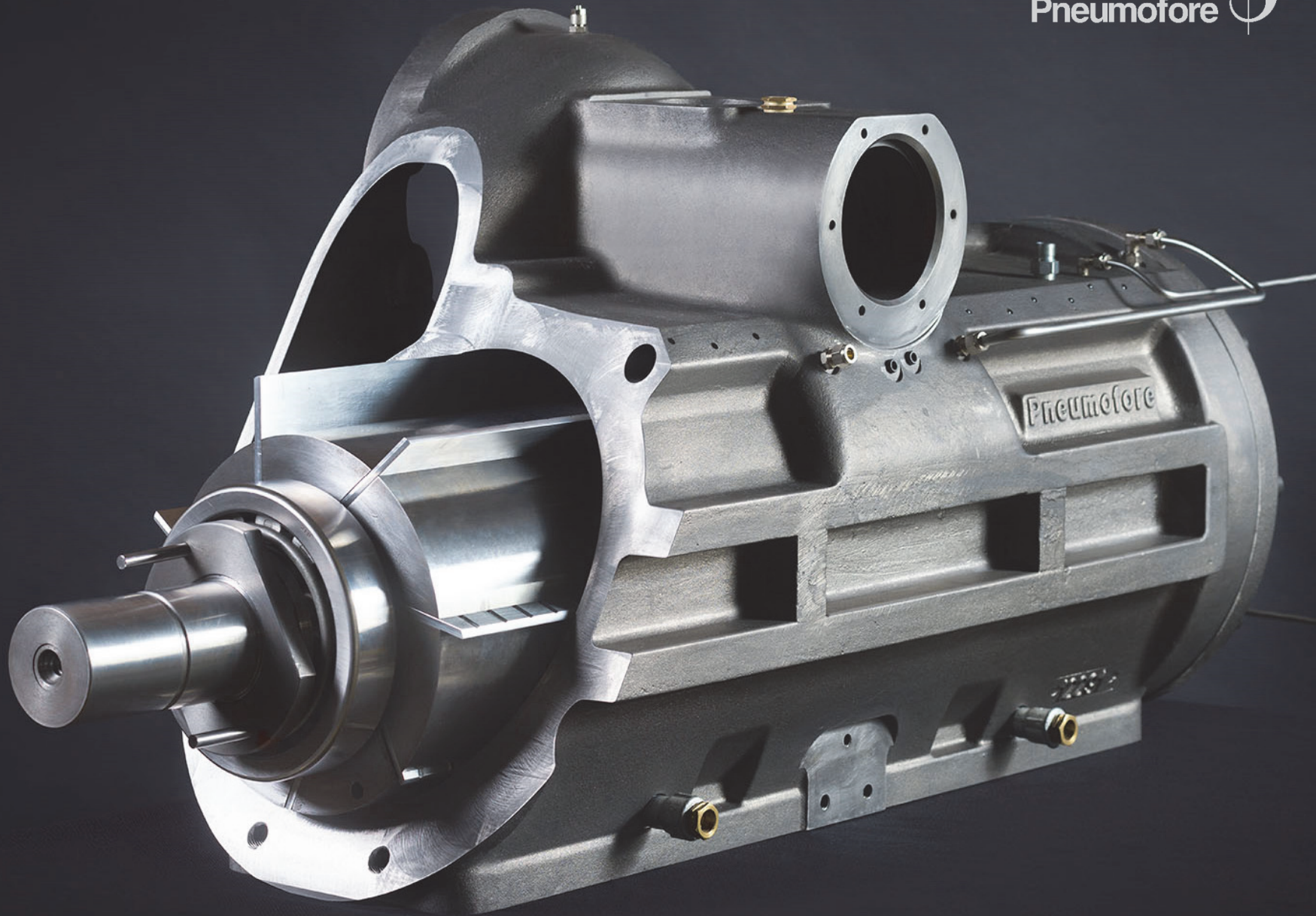
LIVER = OIL SEPARATOR

SENSES = SENSORS



Overhauling of a 40+ years old rotary vane compressor













Options and features of our compressors and vacuum pumps

- Machines ready-to-use
- Electro-Pneumatic control as standard
- Electronic, digital, remote control as option
- Simple ordinary maintenance
- Highest efficiency
- Easy repair/overhaul
- Variable Speed for constant pressure/vacuum
- Hot Climate version for air cooling up to 55°C
- Heat Recovery systems
- Lowest Total Cost of Ownership or Life Cycle Cost



Case Study with ROI calculation

Return on Investment

Analysis of the present System and comparison with rotary vane pumps and compressors

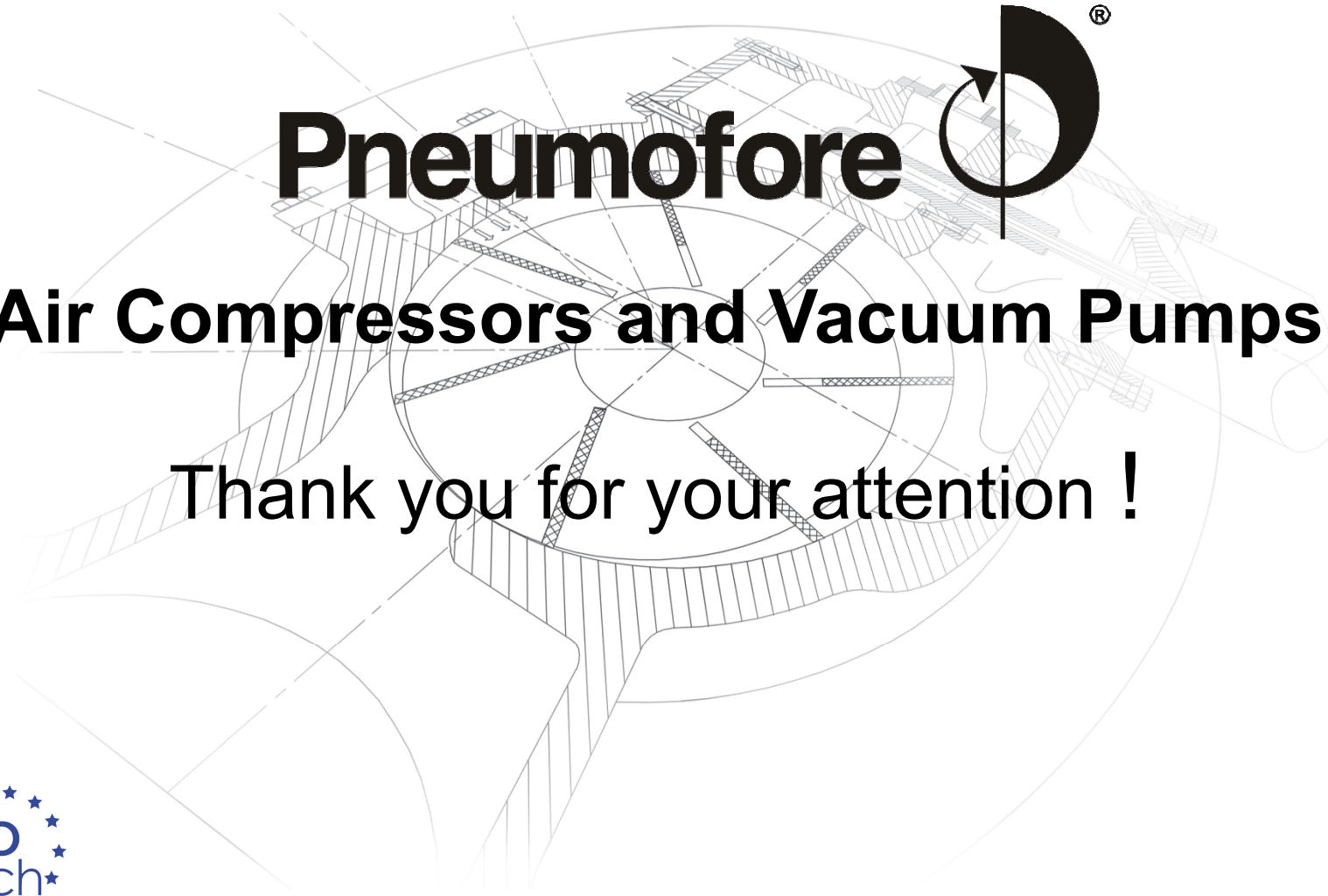
Measure of electrical Consumption instead of Catalog data !

Consider all costs: manpower for service, consumable spare parts, overhauling, water cooling



Summary

- High Capacity, high Efficiency, air cooling up to 55°C
- Important cost Savings, replacement of screw and liquid ring machines with ROI of as low as 18 months
- Reduced electrical power Consumption and minimal environmental Footprint



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Thank you for your attention !