



**Krone
Global** Compressor

GENERAL CATALOG

CONTENT

TO KNOW MORE

BIG EVENTS

FUTURE WILL NEVER BE THE SAME

PRODUCTS PORTFOLIO

SERVICES & PRODUCTS SUPPORT

ORGANIZATION

CUSTOMERS

CERTIFICATES

KRONE PRODUCTS PORTFOLIO

- PUMPS
- COMPRESSORS
- GEARBOXES



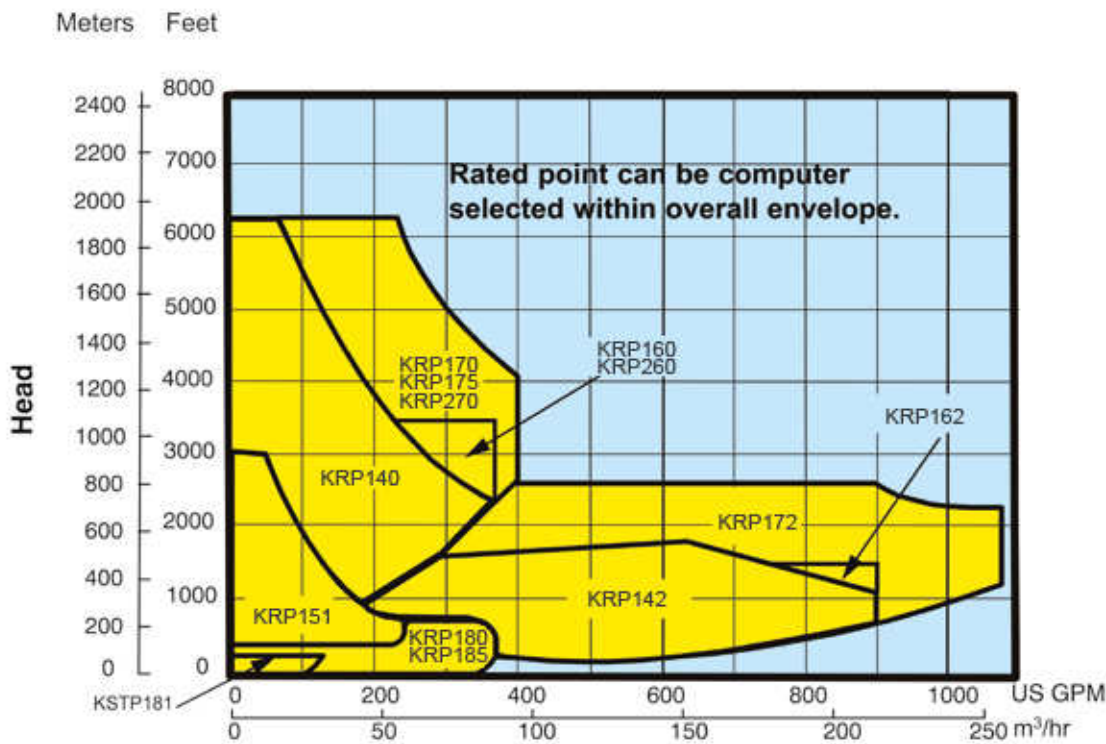
HIGH-SPEED INTEGRALLY GEARED CENTRIFUGAL PUMPS (API 610 10TH EDITION, OH6)



HIGH-SPEED INTEGRAL GEAR-DRIVEN SINGLE-STAGE OVERHUNG PUMPS SHALL BE DESIGNATED PUMP TYPE OH6. THESE PUMPS HAVE A SPEED INCREASING GEARBOX INTEGRATED WITH THE PUMP. THE IMPELLER IS MOUNTED DIRECTLY TO THE GEARBOX OUTPUT SHAFT. THERE IS NO COUPLING BETWEEN THE GEARBOX AND PUMP; HOWEVER, THE GEARBOX IS FLEXIBLY COUPLED TO ITS DRIVER. THE PUMPS MAY BE ORIENTED VERTICALLY OR HORIZONTALLY.

THIS TYPE OF PUMPS ARE IDEAL FOR CRITICAL HEAVY-DUTY PROCESS APPLICATIONS

KRONE PUMPS PERFORMANCE ENVELOPE



KRONE PUMPS TYPICAL SERVICES AND APPLICATIONS

- | | | | |
|--|--|---|--|
| <ul style="list-style-type: none">• ACID TRANSFER• AGRICULTURE• AIR POLLUTION• ALKYLATION• AMINE TREATING• AROMATICS• AUXILIARY FEED• BACKWASH• BEVERAGE PROCESSING• BIODIESEL• BIOFUELS• BIOPROCESSING• BOILER CIRCULATION• BOILER FEED BOOSTER• BOILER FEEDWATER SYSTEMS• BOOSTER• BRINE• BRINE DISPOSAL• BRINE INJECTION• BRINE TREATMENT• BULK CHEMICALS• BUTANE TRANSFER• CARGO LOADING AND UNLOADING• CATALYTIC CRACKING• CATALYTIC REFORMING• CEMENT PRODUCTION• CENTRAL CLEANING• CHILLERS• CIRCULATING WATER• CIRCULATION• CONCENTRATOR• CONDENSATE• CONDENSATE COOLING WATER• CONDENSATE EXTRACTION | <ul style="list-style-type: none">• CONDENSER COOLING• CONTAINMENT SPRAY• CORROSIVE SERVICES• CRUDE OIL LOADING• CRUDE OIL TRANSFER• CRYOGENIC SERVICE• CRYSTALLIZERS• DEEP WELL• DEHYDROGENATION• DESALINATION• DESCALING• DEWATERING• DIESEL FUEL• DRAINAGE• DUST SUPPRESSION• EMERGENCY FEEDWATER• EMISSIONS REDUCTION• ENERGY RECOVERY• ESSENTIAL SERVICE WATER• EVAPORATORS• FEEDWATER BOOSTER• FELT WASH• FERTILIZER• FILTER BACKWASH• FILTRATION• FLAMMABLE LIQUIDS• FLUE GAS DESULPHURIZATION• FLUE GAS WET SCRUBBING FLY• ASH• FOOD PROCESSING• FUEL• GAS PRODUCTION• GAS SCRUBBING | <ul style="list-style-type: none">• GASIFICATION• GASOLINE• GENERAL PROCESSING INDUSTRY• GENERAL PURPOSE• GEOTHERMAL• HEAT RECOVERY STEAM GENERATOR• HEATER CHARGE• HIGH PRESSURE WASHDOWN• HIGH PRESSURE WATER INJECTION• HIGH TEMPERATURE SERVICE• HYDROCRACKING• HYDROTREATING• INDUSTRIAL PLANT SERVICES• INDUSTRIAL WASTE• INORGANIC CHEMICALS• ISOMERIZATION• LIGHT OILS• LIQUID TRANSFER• LUBRICATING OIL• MEMBRANE FEED• MINE DEWATERING• MINERAL PROCESSING• MIXED LIQUOR• OEM• OFFSHORE• OIL PRODUCTION• ORGANIC CHEMICALS• OXYGENATES PRODUCTION• PETROCHEMICAL PROCESSING• PETROLEUM PRODUCTION AND REFINING• PLASTICS• POLLUTION CONTROL• PROPANE TRANSFER | <ul style="list-style-type: none">• REACTOR CIRCULATION• REACTOR FEED• RECYCLING SERVICES• REVERSE OSMOSIS• SCREEN WASH• SCRUBBERS• SEAL INJECTION• SEAWATER REVERSE OSMOSIS SWRO• SEPARATION• SHUTDOWN COOLING• SNOWMAKING• SOUR WATER• STEAM GENERATOR FEED• SUGAR PROCESSING• SULFUR COMPOUND EXTRACTION• SULFUR SWEETENING• SYNTHETIC FUELS• TANK FARM TRANSFER• TRIM SQUIRT• UTILITY• VISBREAKING• WASHDOWN• WASHING SYSTEMS• WASTE TREATMENT• WASTEWATER TREATMENT• WATER• WATER BOOSTING• WATER COOLING• WATER INJECTION• WATER POLLUTION• WATER SUPPLY• WATER TREATMENT |
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HIGH-SPEED INTEGRALLY GEARED CENTRIFUGAL PUMPS

KRP140

TYPE	HIGH-SPEED INTEGRALLY GEARED SINGLE-STAGE CENTRIFUGAL PUMP
HEAD	UP TO 1820 M (UP TO 6300 FT)
FLOW RATE	UP TO 400 M3/HR (UP TO 90 GPM)
MAX. POWER REQUIRED	150 KW (200 HP)
MAX. SUCTION PRESSURE	70 BAR (1000 PSI)
SPEED RANGE	6,000 TO 20,000 RPM
MOUNTING CONFIGURATION	VERTICAL
SUCTION AND DISCHARGE FLANGES	3"X2", 600#, OR 900# OPTIONAL (ANSI RF OR RTD)

KRP142

TYPE	HIGH-SPEED INTEGRALLY GEARED SINGLE-STAGE CENTRIFUGAL PUMP
HEAD	30 TO 550 M (100 TO 1,790 FT)
FLOW RATE	20 TO 200 M3/HR (100 TO 1000 GPM)
MAX. POWER REQUIRED	150 KW (200 HP)
MAX. SUCTION PRESSURE	36 BAR (500 PSI)
SPEED RANGE	6,600 TO 12,000 RPM
MOUNTING CONFIGURATION	VERTICAL
SUCTION AND DISCHARGE FLANGES	6"X4", 600# (ANSI RF)

KRP151

TYPE	HIGH-SPEED INTEGRALLY GEARED SINGLE-STAGE CENTRIFUGAL PUMP
HEAD	100 TO 3,000 M (30 TO 915 FT)
FLOW RATE	0 TO 230 M3/HR (0 TO 50 GPM)
MAX. POWER REQUIRED	37 KW (50 HP)
MAX. SUCTION PRESSURE	32 BAR (450 PSI)
SPEED RANGE	6,000 TO 20,000 RPM
MOUNTING CONFIGURATION	VERTICAL
SUCTION AND DISCHARGE FLANGES	3"X2", 600# OR OTHER RATINGS (ANSI RF)

KRP175

TYPE	HIGH-SPEED INTEGRALLY GEARED SINGLE-STAGE CENTRIFUGAL PUMP
HEAD	65 TO 1,920 M (200 TO 6,300 FT)
FLOW RATE	20 TO 90 M3/HR (100 TO 400 GPM)
MAX. POWER REQUIRED	300 KW (400 HP)
MAX. SUCTION PRESSURE	127 BAR (1800 PSI)
SPEED RANGE	10,000 TO 24,000 RPM
MOUNTING CONFIGURATION	VERTICAL
SUCTION AND DISCHARGE FLANGES	3"X2", 600#, 900#, 1500# (ANSI RF OR RTD)

KRP162

TYPE	HIGH-SPEED INTEGRALLY GEARED SINGLE-STAGE CENTRIFUGAL PUMP
HEAD	30 TO 1,280 M (100 TO 4,200 FT)
FLOW RATE	100 TO 220 M3/HR (500 TO 1,000 GPM)
MAX. POWER REQUIRED	186 KW (250 HP)
MAX. SUCTION PRESSURE	36 BAR (500 PSI)
SPEED RANGE	9,300 TO 14,400 RPM
MOUNTING CONFIGURATION	VERTICAL
SUCTION AND DISCHARGE FLANGES	6"X4", 600# (ANSI RF)

KRP180

TYPE	SINGLE-STAGE CLOSE COUPLED CENTRIFUGAL PUMP
HEAD	3 TO 219 M (10 TO 720 FT)
FLOW RATE	8 TO 85 M3/HR (10 TO 380 GPM)
MAX. POWER REQUIRED	55 KW (75 TO 100 HP)
MAX. SUCTION PRESSURE	70 BAR (1000 PSI)
SPEED RANGE	1,450 TO 3,550 RPM
MOUNTING CONFIGURATION	VERTICAL, HORIZONTAL
SUCTION AND DISCHARGE FLANGES	3"X2", 600#, OR 900# OPTIONAL (ANSI RF)

KRP172

TYPE	HIGH-SPEED INTEGRALLY GEARED SINGLE-STAGE CENTRIFUGAL PUMP
HEAD	15 TO 915 M (50 TO 3,000 FT)
FLOW RATE	8 TO 200 M3/HR (50 TO 1,000 GPM)
MAX. POWER REQUIRED	300 KW (400 HP)
MAX. SUCTION PRESSURE	36 BAR (500 PSI)
SPEED RANGE	7,700 TO 16,200 RPM
MOUNTING CONFIGURATION	VERTICAL
SUCTION AND DISCHARGE FLANGES	6"X4", 600# (ANSI RF)

KRP181

TYPE	SINGLE-STAGE CLOSE COUPLED CENTRIFUGAL PUMP
HEAD	6 TO 65 M (20 TO 210 FT)
FLOW RATE	8 TO 33 M3/HR (10 TO 150 GPM)
MAX. POWER REQUIRED	37 KW (50 HP)
MAX. SUCTION PRESSURE	42 BAR (600 PSI)
SPEED RANGE	1,450 TO 3,550 RPM
MOUNTING CONFIGURATION	VERTICAL
SUCTION AND DISCHARGE FLANGES	3"X2", 600# OR OTHER RATINGS (ANSI RF)

KRP 160/260

TYPE	HIGH-SPEED INTEGRALLY GEARED SINGLE-STAGE CENTRIFUGAL PUMP
HEAD	200 TO 1500 M (500 TO 4,800 FT)
FLOW RATE	0 TO 90 M3/HR (0 TO 400 GPM)
MAX. POWER REQUIRED	250 KW (350 HP)
MAX. SUCTION PRESSURE	70 BAR (1,000 PSI)
SPEED RANGE	10,000 TO 20,000 RPM
MOUNTING CONFIGURATION	VERTICAL, HORIZONTAL
SUCTION AND DISCHARGE FLANGES	3"X2", 600#, OR 900# OPTIONAL (ANSI RF)

KRP370

TYPE	HIGH-SPEED INTEGRALLY GEARED SINGLE-STAGE CENTRIFUGAL PUMP (GENERAL SERVICE NON-API)
HEAD	75 TO 790 M (250 TO 2,600 FT)
FLOW RATE	4 TO 50 M3/HR (20 TO 180 GPM)
MAX. POWER REQUIRED	65 KW (75 HP)
MAX. SUCTION PRESSURE	18 BAR (250 PSI)
SPEED RANGE	5,700 TO 14,500 RPM
MOUNTING CONFIGURATION	VERTICAL, HORIZONTAL
SUCTION AND DISCHARGE FLANGES	2"X1.5", 300#, 600# (ANSI RF)

KRP 170/270

TYPE	HIGH-SPEED INTEGRALLY GEARED SINGLE-STAGE CENTRIFUGAL PUMP
HEAD	150 TO 1,920 M (500 TO 6,300 FT)
FLOW RATE	8 TO 90 M3/HR (10 TO 400 GPM)
MAX. POWER REQUIRED	300 KW (400 HP)
MAX. SUCTION PRESSURE	70 BAR (1000 PSI)
SPEED RANGE	10,000 TO 24,000 RPM
MOUNTING CONFIGURATION	VERTICAL, HORIZONTAL
SUCTION AND DISCHARGE FLANGES	3"X2", 600#, OR 900# OPTIONAL (ANSI RF OR RTD)

KRP430

TYPE	HIGH-SPEED INTEGRALLY GEARED MULTI-STAGE CENTRIFUGAL PUMP
HEAD	300 TO 3,000 M (1,000 TO 10,000 FT)
FLOW RATE	10 TO 400 M3/HR (60 TO 440 GPM)
MAX. POWER REQUIRED	600 KW (800 HP)
MAX. SUCTION PRESSURE	30 BAR (425 PSI)
SPEED RANGE	8,000 TO 22,000 RPM
MOUNTING CONFIGURATION	HORIZONTAL
SUCTION AND DISCHARGE FLANGES	4"X3", 300#, 600#, 900# OR 1,500# (ANSI RF OR RTD)

KRP330

TYPE	HIGH-SPEED INTEGRALLY GEARED SINGLE-STAGE CENTRIFUGAL PUMP (GENERAL SERVICE NON-API)
HEAD	150 TO 1280 M (500 TO 4,200 FT)
FLOW RATE	10 TO 110 M3/HR (50 TO 500 GPM)
MAX. POWER REQUIRED	186 KW (250 HP)
MAX. SUCTION PRESSURE	25 BAR (350 PSI)
SPEED RANGE	6,550 TO 17,550 RPM
MOUNTING CONFIGURATION	VERTICAL, HORIZONTAL
SUCTION AND DISCHARGE FLANGES	4"X3", 3"X2", 900# (ANSI RF)

KRP450

TYPE	HIGH-SPEED INTEGRALLY GEARED MULTI-STAGE CENTRIFUGAL PUMP
HEAD	3 TO 4,400 M (10 TO 14,500 FT)
FLOW RATE	2 TO 220 M3/HR (80 TO 1,000 GPM)
MAX. POWER REQUIRED	1865 KW (2500 HP)
MAX. SUCTION PRESSURE	70 BAR (1000 PSI)
SPEED RANGE	12,500 TO 25,000 RPM
MOUNTING CONFIGURATION	HORIZONTAL
SUCTION AND DISCHARGE FLANGES	4"X4", 300#, 600#, 900#, 1,500# OR 2,500# (ANSI RF OR RTD)

KRP360

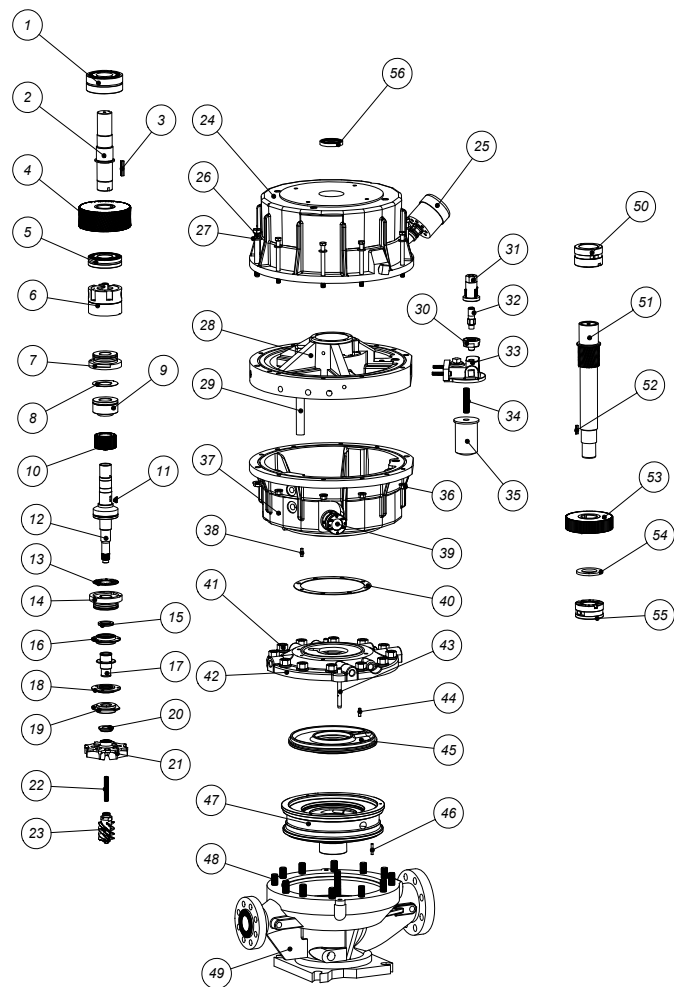
TYPE	HIGH-SPEED INTEGRALLY GEARED SINGLE-STAGE CENTRIFUGAL PUMP (GENERAL SERVICE NON-API)
HEAD	30 TO 400 M (100 TO 1,300 FT)
FLOW RATE	2 TO 7 M3/HR (10 TO 35 GPM)
MAX. POWER REQUIRED	7 KW (10 HP)
MAX. SUCTION PRESSURE	14 BAR (200 PSI)
SPEED RANGE	13,000 TO 32,000 RPM
MOUNTING CONFIGURATION	VERTICAL, HORIZONTAL
SUCTION AND DISCHARGE FLANGES	1"X1", 300# (ANSI RF)

KRP470

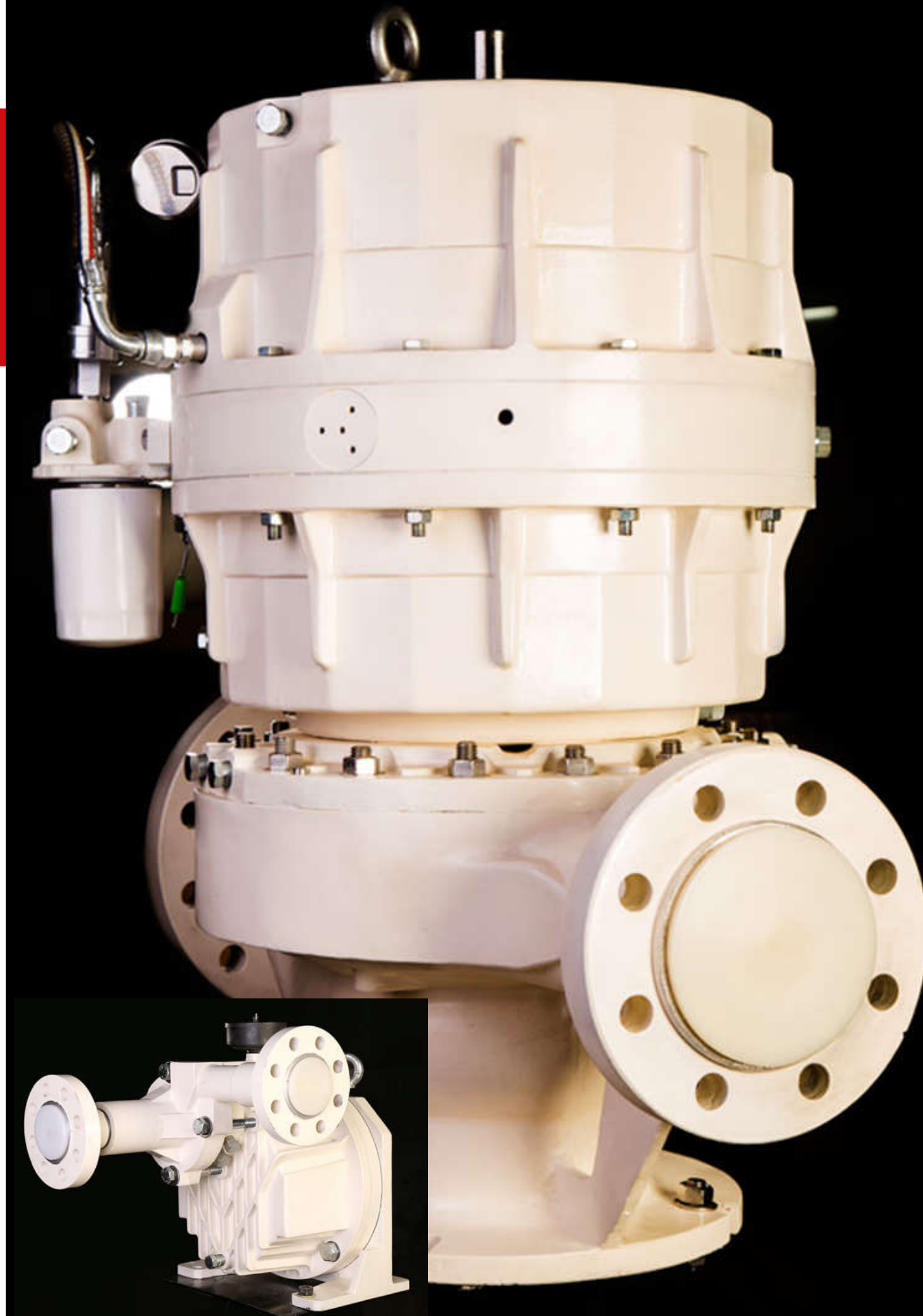
TYPE	HIGH-SPEED INTEGRALLY GEARED MULTI-STAGE CENTRIFUGAL PUMP
HEAD	320 TO 4,570 M (1,000 TO 15,000 FT)
FLOW RATE	0 TO 360 M3/HR (0 TO 1,580 GPM)
MAX. POWER REQUIRED	0 TO 1,750 KW (0 TO 2,400 HP)
MAX. SUCTION PRESSURE	70 BAR (1000 PSI)
SPEED RANGE	3,000 TO 29,000 RPM
MOUNTING CONFIGURATION	HORIZONTAL
SUCTION AND DISCHARGE FLANGES	6"X6" OR 8"X6", 600#, 900#, OR 2,500# (ANSI RF OR RTD)

KRP185

TYPE	SINGLE-STAGE CLOSE COUPLED CENTRIFUGAL PUMP
HEAD	3 TO 325 M (10 TO 760 FT)
FLOW RATE	8 TO 85 M3/HR (10 TO 380 GPM)
MAX. POWER REQUIRED	55 KW (75 HP)
MAX. SUCTION PRESSURE	40 BAR (557 PSI)
SPEED RANGE	1,450 TO 3,550 RPM
MOUNTING CONFIGURATION	VERTICAL, HORIZONTAL
SUCTION AND DISCHARGE FLANGES	3"X2", 600# OR OTHER RATINGS (ANSI RF)

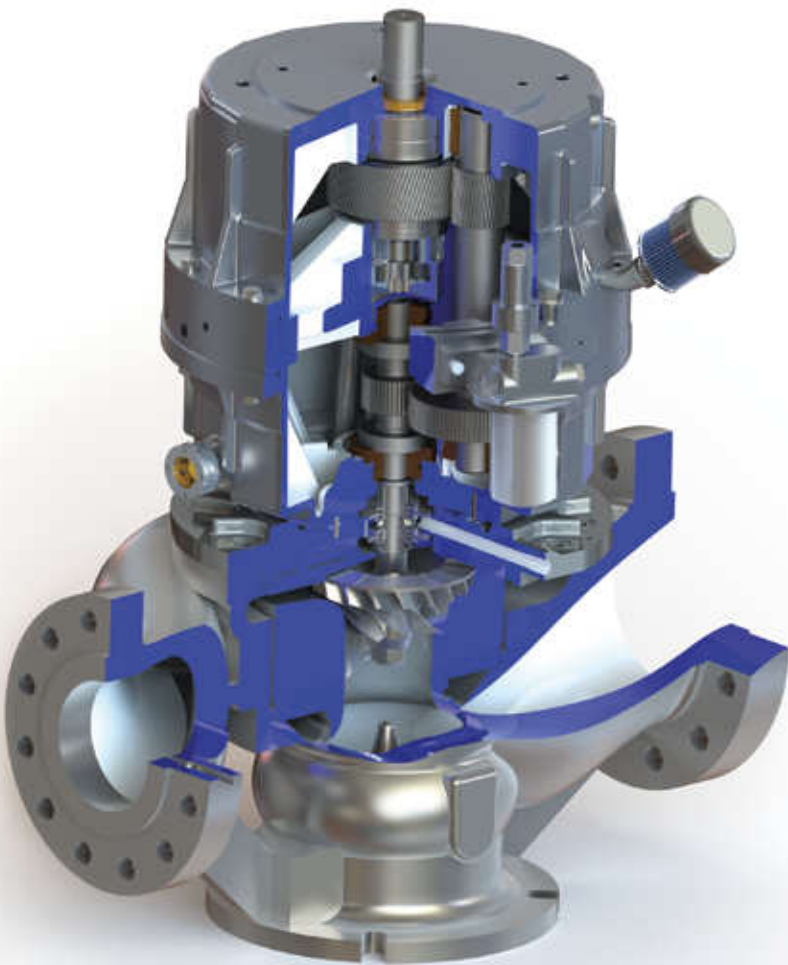


No.	Part Name
1	Spherical Roller Bearing
2	Low Speed Shaft
3	Key
4	Helical Gear
5	Spherical Roller Bearing
6	Oil Pump
7	Journal Bearing(Upper)
8	Thrust Washer(Upper)
9	Thrust Runner
10	Pinion Gear
11	High Speed Shaft
12	Key
13	Thrust Washer(Lower)
14	Journal Bearing(Upper)
15	Rotating Face
16	Slinger Sleeve
17	Mechanical Seal
18	Mechanical Seal
19	Mechanical Seal
20	Rotating Face
21	Impeller
22	Impeller Bolt
23	Inducer
24	Gearbox Housing Input
25	Dessicant Breather
26	Alignment Bolt
27	Alignment Washer
28	Bearing Plate
29	Sump Tube
30	Lower Casing
31	Upper Casing
32	Relief Valve
33	Filter Manifold
34	Nipple
35	Oil Filter
36	Gearbox Housing Output
37	Alignment Nut
38	Pin
39	Sight Glass
40	Gasket
41	Hex Nut
42	Seal Housing
43	Alignment Pin
44	Pin
45	Diffuser Cover
46	Diffuser
47	Pin
48	Stud
49	Pump Casing
50	Journal Bearing
51	Idler Shaft
52	Key
53	Spur Gear
54	Thrust Runner
55	Journal Bearing
56	Shaft Seal



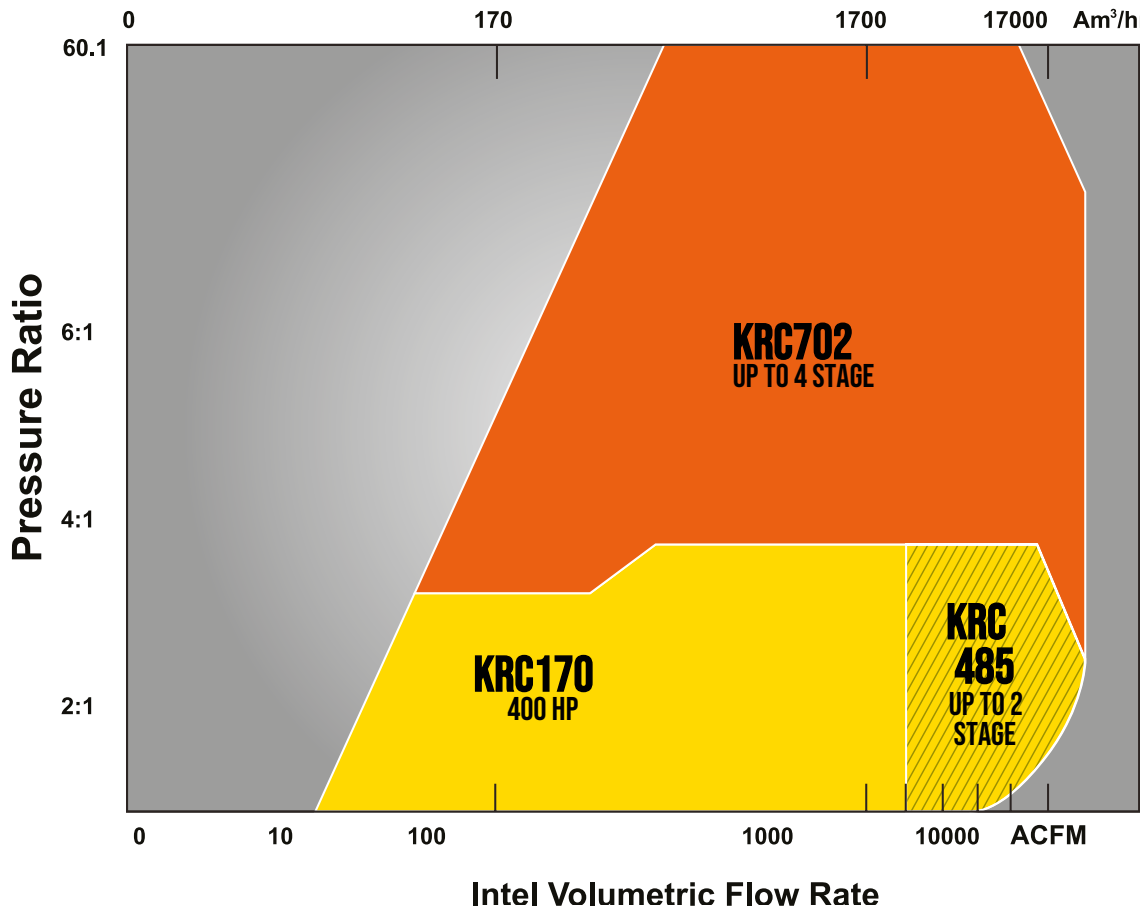
HIGH-SPEED CENTRIFUGAL COMPRESSORS

[SINGLE/MULTI-STAGE]



KRONE DESIGNS AND MANUFACTURES SINGLE-STAGE AND MULTI-STAGE COMPRESSORS COMPLIED WITH API 617 AND API 672 STANDARDS. USING THE ADVANCED MACHINERY AND EQUIPMENT SIDE BY SIDE WITH TECHNICAL AND TECHNOLOGICAL KNOWLEDGE, BASED UPON THE LATEST DESIGNING METHODS AND DESIGNING-FROM-SCRATCH, HAVE LED KRONE TO BE PRESENT IN THE LATEST AND THE MOST UP-TO-DATE REALM OF THE TURBOMACHINERY. THESE COMPRESSORS ARE PRIMARILY USED FOR CONTINUOUS, STATIONARY SERVICE IN THE OIL REFINERIES, CHEMICAL AND PETROCHEMICAL PLANTS AND NATURAL GAS PROCESSING PLANTS. THEIR APPLICATION CAN BE FROM 100 TO 4,000 HP (75 TO 3,000 KW). MULTIPLE COMPRESSORS CHAINED TOGETHER CAN ACHIEVE EXTREMELY HIGH OUTPUT PRESSURES UP TO 4,000 PSIA (350 BARA).

KRONE COMPRESSOR PERFORMANCE ENVELOPE



KRONE COMPRESSORS TYPICAL SERVICES AND APPLICATIONS

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|---|--|--|---|
| <ul style="list-style-type: none">• ACETIC ACID• ACETYLENE• AMMONIA• ATOMIZING AIR• BUTANE• CHEMICAL PROCESSING• CHEMICAL TRANSFER• CHLORINE• CLEAN FUELS• CORROSIVE GASES | <ul style="list-style-type: none">• DESULFURIZATION• ETHYLENE• EVAPORATORS• FLUE GAS DESULPHURIZATION• FUEL GAS• GAS BOOST• GAS PRODUCTION• GASIFICATION• GENERAL PROCESSING INDUSTRY• H₂S WET GAS | <ul style="list-style-type: none">• HC BOOST• HYDROCARBON PROCESSING• HYDROGEN• LIFT GAS• MTBE REPLACEMENT• NATURAL GAS• NATURAL GAS EXTRACTION• NITROGEN• OEM• PETROLEUM PRODUCTION AND REFINING | <ul style="list-style-type: none">• PIPELINE BOOSTER• POLYPROPYLENE• POWER GENERATION• PURGE GAS• RECYCLE• REFRIGERATION• REGENERATION• STRIPPER OVERHEAD• VAPOR RECOVERY• WASTE GAS |
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KRC 140/240

TYPE	HIGH-SPEED INTERNALLY GEARED SINGLE-STAGE CENTRIFUGAL COMPRESSOR
FLOW RATE	UP TO 1,450 AM3/HR (UP TO 850 ACFM)
MAX. POWER REQUIRED	150 KW (200 HP)
MAX. WORKING PRESSURE	100 BAR (1,400 PSI)
SPEED RANGE	MAX. 33,600 RPM
MOUNTING CONFIGURATION	VERTICAL, HORIZONTAL
SUCTION AND DISCHARGE FLANGES	3"X2", 600# OR OTHER RATINGS (ANSI RF)

KRC 142/242

TYPE	HIGH-SPEED INTERNALLY GEARED SINGLE-STAGE CENTRIFUGAL COMPRESSOR
FLOW RATE	3570 AM3/HR (2100 ACFM)
MAX. POWER REQUIRED	150 KW (200 HP)
MAX. WORKING PRESSURE	70 BAR (1000 PSI)
SPEED RANGE	MAX. 33,600 RPM
MOUNTING CONFIGURATION	VERTICAL, HORIZONTAL
SUCTION AND DISCHARGE FLANGES	6"X4", 600# OR OTHER RATINGS (ANSI RF)

KRC 146/246

TYPE	HIGH-SPEED INTERNALLY GEARED SINGLE-STAGE CENTRIFUGAL COMPRESSOR
FLOW RATE	6000 AM3/HR (3,500 ACFM)
MAX. POWER REQUIRED	150 KW (200 HP)
MAX. WORKING PRESSURE	70 BAR (1000 PSI)
SPEED RANGE	MAX. 33,600 RPM
MOUNTING CONFIGURATION	VERTICAL, HORIZONTAL
SUCTION AND DISCHARGE FLANGES	8"X6", 600# OR OTHER RATINGS (ANSI RF)

KRC 160/260

TYPE	HIGH-SPEED INTERNALLY GEARED SINGLE-STAGE CENTRIFUGAL COMPRESSOR
FLOW RATE	1450 AM3/HR (850 ACFM)
MAX. POWER REQUIRED	300 KW (400 HP)
MAX. WORKING PRESSURE	100 BAR (1400 PSI)
SPEED RANGE	MAX. 33,600 RPM
MOUNTING CONFIGURATION	VERTICAL, HORIZONTAL
SUCTION AND DISCHARGE FLANGES	3"X2", 600# OR OTHER RATINGS (ANSI RF)

KRC 162/262

TYPE	HIGH-SPEED INTERNALLY GEARED SINGLE-STAGE CENTRIFUGAL COMPRESSOR
FLOW RATE	3570 AM3/HR (2100 ACFM)
MAX. POWER REQUIRED	300 KW (400 HP)
MAX. WORKING PRESSURE	70 BAR (1000 PSI)
SPEED RANGE	MAX. 33,600 RPM
MOUNTING CONFIGURATION	VERTICAL, HORIZONTAL
SUCTION AND DISCHARGE FLANGES	6"X4", 600# OR OTHER RATINGS (ANSI RF)

KRC 166/266

TYPE	HIGH-SPEED INTERNALLY GEARED SINGLE-STAGE CENTRIFUGAL COMPRESSOR
FLOW RATE	6030 AM3/HR (3550 ACFM)
MAX. POWER REQUIRED	300 KW (400 HP)
MAX. WORKING PRESSURE	70 BAR (1000 PSI)
SPEED RANGE	MAX. 33,600 RPM
MOUNTING CONFIGURATION	VERTICAL, HORIZONTAL
SUCTION AND DISCHARGE FLANGES	8"X6", 600# OR OTHER RATINGS (ANSI RF)

KRC 170/270

TYPE	HIGH-SPEED INTERNALLY GEARED SINGLE-STAGE CENTRIFUGAL COMPRESSOR
FLOW RATE	1450 AM3/HR (850 ACFM)
MAX. POWER REQUIRED	335 KW (450 HP)
MAX. WORKING PRESSURE	100 BAR (1400 PSI)
SPEED RANGE	MAX. 33,600 RPM
MOUNTING CONFIGURATION	VERTICAL, HORIZONTAL
SUCTION AND DISCHARGE FLANGES	3"X2", 600# OR OTHER RATINGS (ANSI RF)

KRC 172/272

TYPE	HIGH-SPEED INTERNALLY GEARED SINGLE-STAGE CENTRIFUGAL COMPRESSOR
FLOW RATE	3570 AM3/HR (2100 ACFM)
MAX. POWER REQUIRED	335 KW (450 HP)
MAX. WORKING PRESSURE	70 BAR (1000 PSI)
SPEED RANGE	MAX. 33,600 RPM
MOUNTING CONFIGURATION	VERTICAL, HORIZONTAL
SUCTION AND DISCHARGE FLANGES	6"X4", 600# OR OTHER RATINGS (ANSI RF)

KRC420

TYPE	HIGH-SPEED INTERNALLY GEARED MULTI-STAGE CENTRIFUGAL COMPRESSOR
FLOW RATE	17000 AM3/HR (10000 ACFM)
MAX. POWER REQUIRED	3000 KW (4000 HP)
MAX. WORKING PRESSURE	350 BAR (4000 PSI)
SPEED RANGE	MAX. 42,000 RPM
MOUNTING CONFIGURATION	HORIZONTAL
SUCTION AND DISCHARGE FLANGES	3-14"X2-12", 150#, 300#, 600# OR OTHER RATINGS (ANSI RF)

KRC485

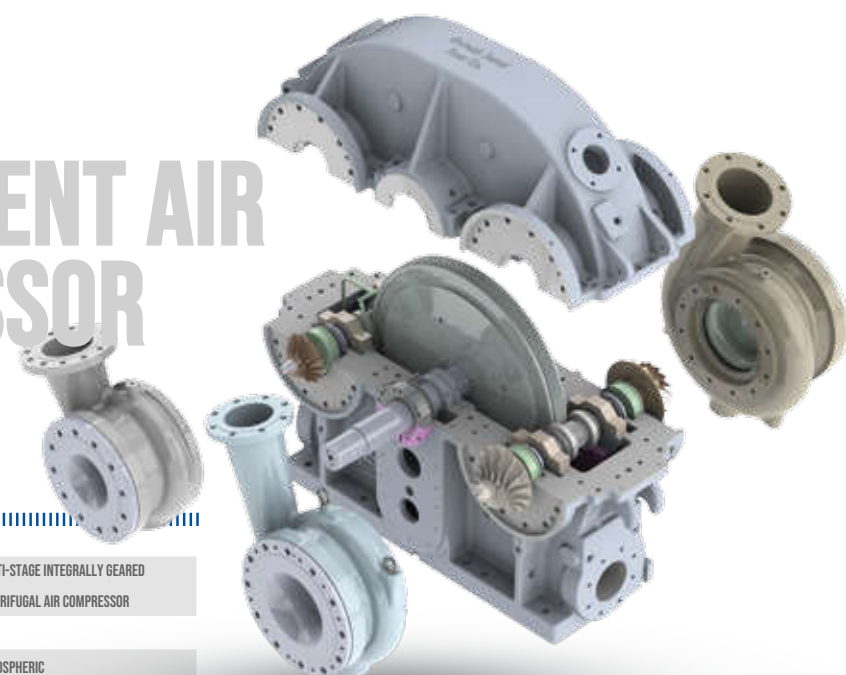
TYPE	HIGH-SPEED INTERNALLY GEARED MULTI-STAGE CENTRIFUGAL COMPRESSOR
FLOW RATE	10200 AM3/HR (6000 ACFM)
MAX. POWER REQUIRED	670 KW (900 HP)
MAX. WORKING PRESSURE	100 BAR (1400 PSI)
SPEED RANGE	MAX. 32,000 RPM
MOUNTING CONFIGURATION	HORIZONTAL
SUCTION AND DISCHARGE FLANGES	4-10"X3-10", 300#, 600# (ANSI RF)



KRC502

TYPE	SINGLE-STAGE HORIZONTAL CENTRIFUGAL COMPRESSOR	
MAX. POWER REQUIRED	1000 HP	
GEARBOX	GEAR RATIO	4.35
	OUTPUT SPEED	12528 RPM
DRIVER MOTOR	SPEED	2280 RPM
	VOLTAGE	600 V
	PHASE	3
	FREQUENCY	50 HZ

KRC702 INSTRUMENT AIR COMPRESSOR

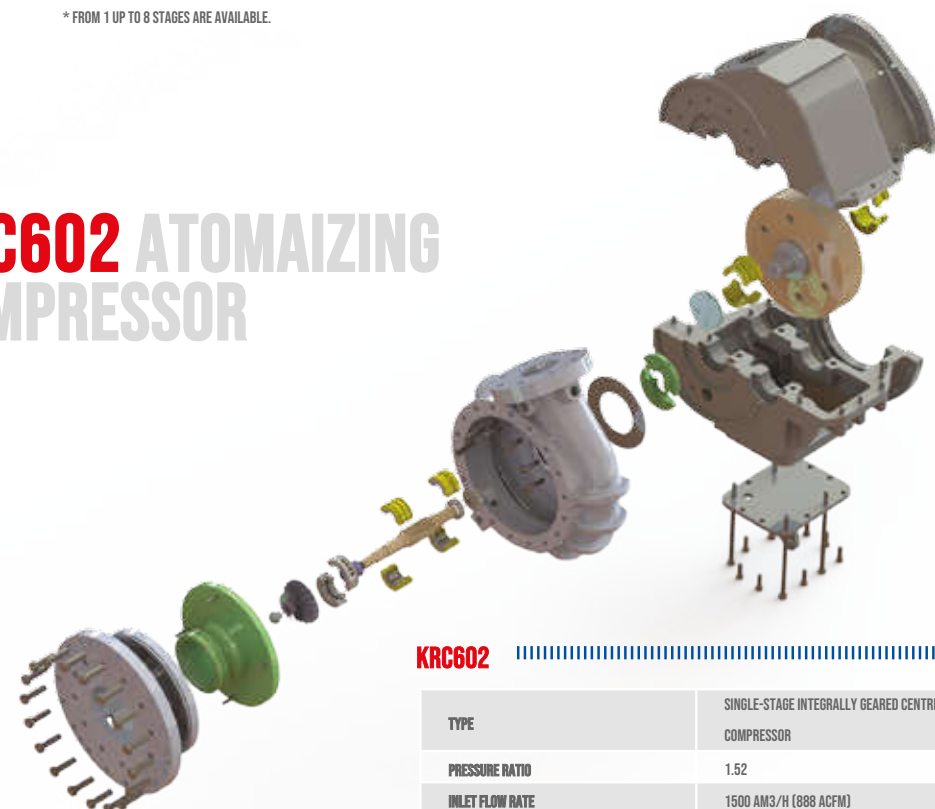


KRC702

TYPE	MULTI-STAGE INTEGRALLY GEARED CENTRIFUGAL AIR COMPRESSOR
NUMBER OF STAGES	3*
INLET PRESSURE	ATMOSPHERIC
OUTPUT PRESSURE	10.2 BAR
INLET FLOW RATE	9000 M3/H
MAX. POWER REQUIRED	936 KW
SPEED	UP TO 42,000 RPM
GEARBOX	KST0903 INTEGRAL GEAR UNIT
STANDARDS	ISO 6336, AGMA 6011, API 613, API 617, API 672

* FROM 1 UP TO 8 STAGES ARE AVAILABLE.

KRC602 ATOMAIZING COMPRESSOR



KRC602

TYPE	SINGLE-STAGE INTEGRALLY GEARED CENTRIFUGAL AIR COMPRESSOR
PRESSURE RATIO	1.52
INLET FLOW RATE	1500 AM3/H (888 ACFM)
MAX. POWER REQUIRED	235 KW (315 HP)
SPEED	UP TO 50,100 RPM

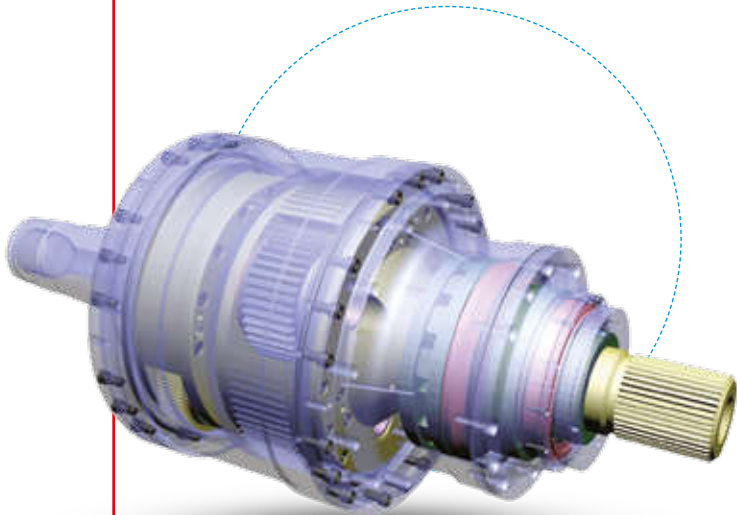


GEARBOXES

CUSTOMIZED DESIGNING AND MANUFACTURING:

- COMPLETE ASSEMBLY OF A HEAVY DUTY GEARBOXES
- SPARE PARTS
- COMPLETE OVERHAUL OF INTEGRALLY GEARED UNITS

KRG653 PLANETARY GEARBOX FOR DECANter CENTRIFUGE



KRG653

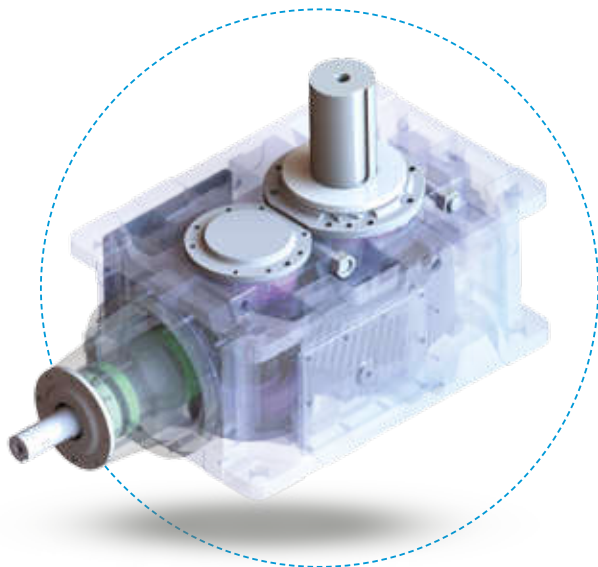
CATEGORY	PLANETARY GEARBOX
POWER TRANSMISSION	200 KW
SPEEDS	DRIVER: 2000 RPM
MAX. ALLOWABLE TORQUE ON GEARBOX	515 NM

BROAD RANGE OF POWER/TORQUE AND DIMENSION ARE COVERED, WHILE A GROUP OF INTERNATIONAL SUB-CONTRACTORS ARE JOINED WITH KRONE WITH A WIDE VARIETY OF TECHNICAL CAPABILITIES IN THE FIELDS SUCH AS GEAR MANUFACTURING, MACHINING, HEAT TREATMENT AND BALANCING; WHILE ALL DOCUMENTATIONS, CALCULATIONS, INSPECTIONS AND TESTS ARE DONE BY KRONE PROFESSIONALS;

FROM 50-KW SPECIAL AGITATOR'S GEARBOXES TO THE HUGE MARINE AND STEEL PLANT SIZES; REDUCER GEARBOXES WITH LESS THAN 200-RPM TO MULTIPLIER HIGH SPEED GEARBOXES (UP TO 50,000 RPM); DIFFERENT ARRANGEMENTS AND TOOTHING METHODS FROM ORDINARY PARALLEL AND BEVEL SPIRAL SET FOR RIGHT ANGLE SYSTEMS TO COMPLEX SYSTEM OF COMBINED-2-STAGE-PLANE-TARY-GEARBOXES (FOR SEPARATION UNITS AND D-CANTER CENTRIFUGES), ALL INCLUDED IN THE RANGE OF KRONE CAPABILITIES.

MAJOR SUCCESSFUL PROJECTS ARE:

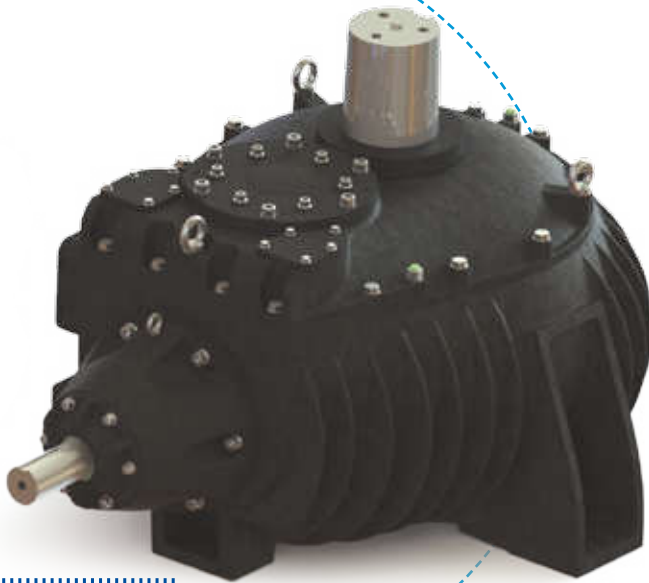
KRG473 REDUCTION GEARBOX FOR COOLING TOWER



KRG473

CATEGORY	REDUCTION GEARBOX
POWER TRANSMISSION	144 KW
SPEEDS	DRIVER: 1485 RPM OUTPUT: 103 RPM
REDUCTION RATIOS	14.34:1
REDUCTION STAGES	2
TOOTHING	RIGHT ANGLE SPIRAL BEVEL

KRG453 REDUCTION GEARBOX FOR COOLING TOWER

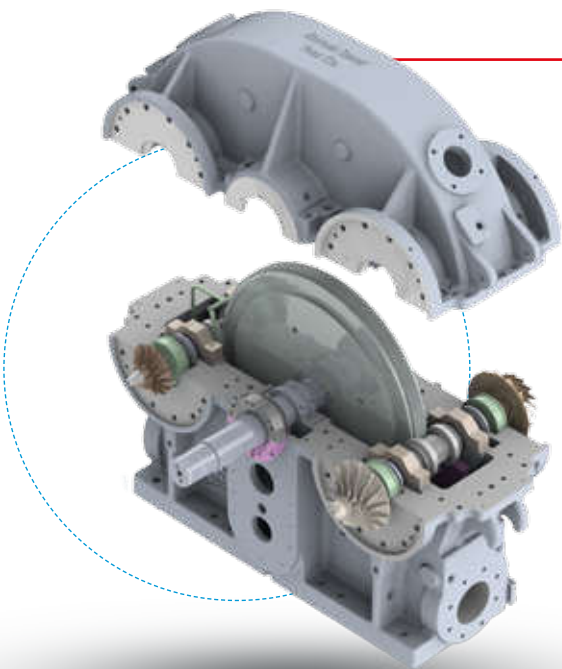


KRG453

CATEGORY	PLANETARY GEARBOX
POWER TRANSMISSION	200 KW
SPEEDS	DRIVER: 1450 RPM OUTPUT: 134 RPM
REDUCTION RATIOS	10.38:1
REDUCTION STAGES	2
TOOTHING	SPIRAL BEVEL & HELICAL

KRG903 INTEGRAL GEAR UNIT

KRG903



CATEGORY	INTEGRAL GEAR UNIT
POWER TRANSMISSION	0.5 - 1 MW
OUTPUT SPEED RANGE	UP TO 42,000 RPM
EFFICIENCY	UP TO 98.5%
GEAR RATIOS	1:1 - 1:14
COMPRESSOR STAGES	1 - 8
HOUSING DESIGN	CAST, WELDED
TOOTHING	SINGLE-HELICAL WITH THRUST COLLAR
DRIVER VERSIONS	• ELECTRIC MOTOR • STEAM TURBINE • STEAM TURBINE + ELECTRIC MOTOR • EXPANSION TURBINE • GAS TURBINE

PUMP & COMPRESSOR SKID



SERVICES & PRODUCTS SUPPORT



WE OFFER A BROAD RANGE OF TECHNICAL SERVICES. WE STRIVE TO PROVIDE PERFECT CUSTOMER SOLUTIONS. OUR IN-DEPTH INDUSTRIAL KNOW-HOW AND THE EXCELLENT COOPERATION OF OUR SPECIALISTS RESULT IN A UNIQUE PORTFOLIO THAT ENABLES US TO RELIABLY SUPPORT OUR CUSTOMERS.

RESPONSIBLE ACTION, INNOVATIVE SOLUTION CONCEPTS AND SERVICES WITH CONTINUOUSLY HIGH QUALITY. HOW YOU BENEFIT: YOU INCREASE THE EFFICIENCY, SAFETY AND AVAILABILITY OF YOUR SYSTEM.

PRODUCTS WE SUPPORT

- GEARBOX UNITS (HIGH SPEED MULTIPLIER AND LOW SPEED REDUCER)
- CENTRIFUGAL PUMPS (BOTH API AND SPECIAL TYPES)
- CENTRIFUGAL COMPRESSORS
- RELATED EQUIPMENT AND ACCESSORIES
- RELATED INSTRUMENTS AND CONTROL PANELS

SERVICES WE PERFORM

- NEED-BASED OPERATING & MAINTENANCE CONCEPTS
- SPECIFIC SPARE PARTS ESPECIALLY FOR PROCESS PRODUCTS
- MAINTENANCE, REPAIR & OVERHAUL
- ASSEMBLY WORKS
- COMMISSIONING & FOLLOW-UP SERVICE
- MODERNIZATION, RETROFITS, UPGRADES & PLANT EXPANSIONS
- ON-SITE SERVICES
 - ▶ ON-SITE MODELS WITH SOLUTION-ORIENTED INDUSTRIAL SERVICES
 - ▶ MAINTENANCE AND REPAIR OF PUMPS, COMPRESSORS AND GEARBOXES
- TESTS & CERTIFICATES
- TRAINING
- SERVICE AGREEMENTS
- OPERATIONAL MEASUREMENTS & CONDITION MONITORING
- PREPARE TECHNICAL DIMENSIONAL DRAWINGS AND DOCUMENTS REQUIRED FOR RE-MANUFACTURING A PART OR AN EQUIPMENT. (REVERSE ENGINEERING DOCUMENTATION)

KRONE ORGANIZATION

- **BOARD OF DIRECTORS**
- **COMMERCIAL & SALES ENGINEERING**
- **RESEARCH & DEVELOPMENT**
- **ENGINEERING & PRODUCTION**
- **ASSEMBLY & TEST**
- **FABLESS MANUFACTURING**
- **QUALITY ASSURANCE & QUALITY CONTROL**
- **STOCK AND PACKAGING**

IN KRONE EVERYONE IS SUPPOSED TO CONTRIBUTE TO INNOVATION. EVERY WORKER AND EMPLOYEE IS A VALUABLE ELEMENT IN OUR GROWTH. OUR HUNGER FOR MORE AND BETTER IS LARGE AND IS PRESENT AT EVERY LEVEL. IN OUR COMPANY, WE HAVE AN OPEN-DOOR POLICY WITHOUT MUCH HIERARCHICAL STAGES. WE COMMUNICATE DIRECTLY AND TO THE POINT. ALL THIS LEADS TO QUICK DECISIONS AND SOLUTIONS

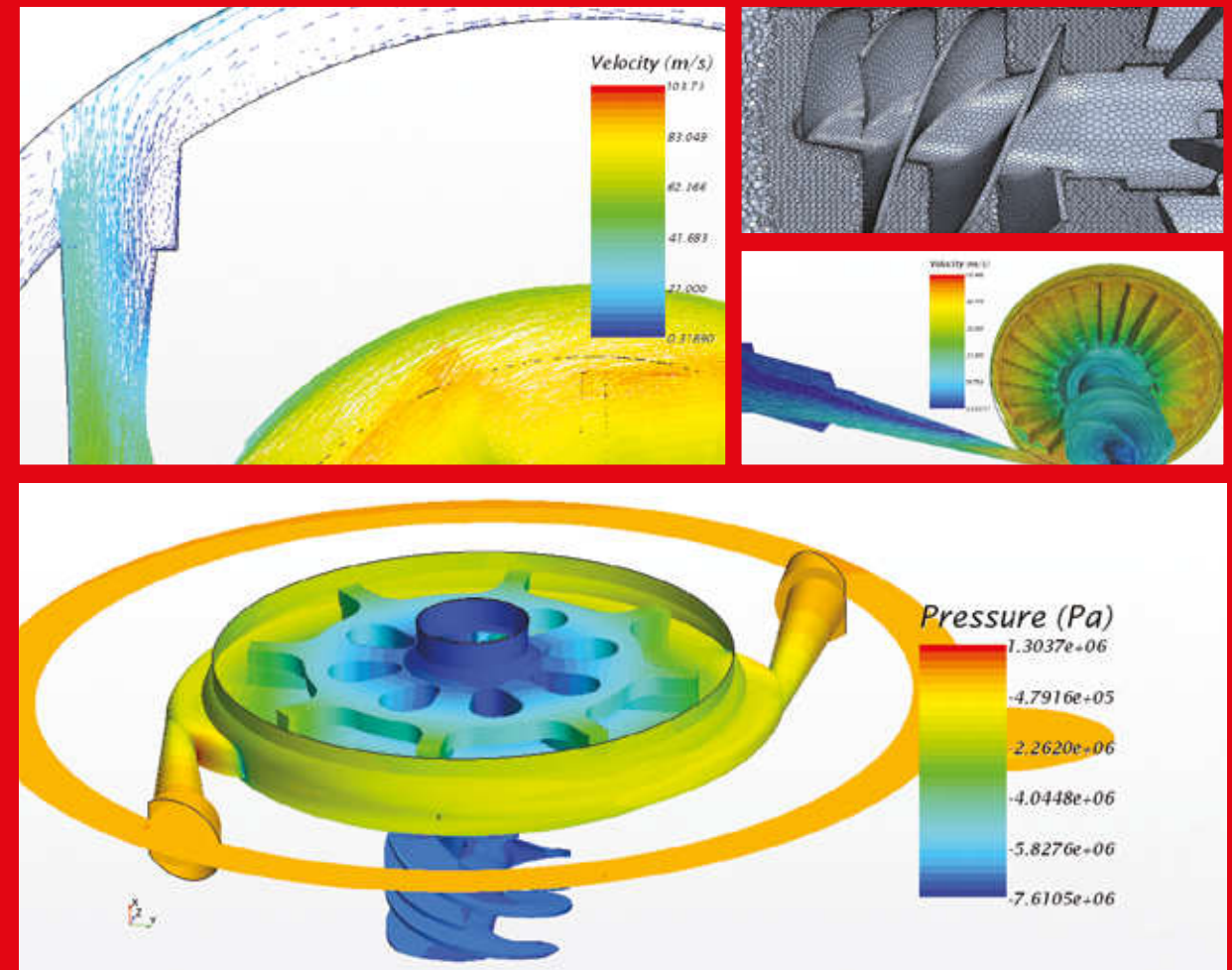
BOARD OF DIRECTORS

KRONE'S BOARD OF DIRECTORS, INCLUDING GENERAL MANAGER AND TECHNICAL EXECUTIVE DIRECTOR, DETERMINE THE COMPANY'S VISION AND MISSION TO GUIDE AND SET THE PACE FOR ITS CURRENT OPERATIONS AND FUTURE DEVELOPMENT. WITH THE HELP OF BEST EXPERTS AND PROFESSIONAL CONSULTANTS WITHIN THE COUNTRY, BOARD MEMBERS CLOSELY MONITOR THE COMPANY'S PERFORMANCE AND CUSTOMERS' REQUIREMENTS TO ENSURE ALL THE ORGANIZATION'S ACTIVITIES AND STRUCTURES ARE APPROPRIATE FOR IMPLEMENTING THE CHOSEN STRATEGIES

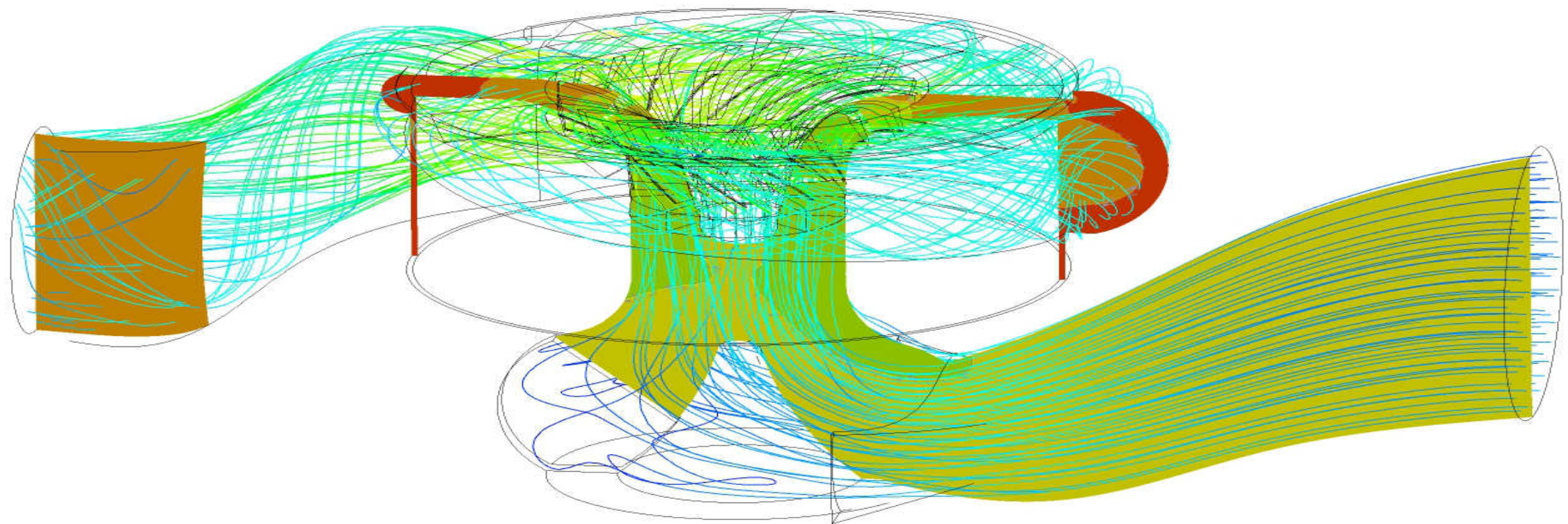
RESEARCH & DEVELOPMENT DEPARTMENT

OUR R&D DEPARTMENT PLAYS AN INTEGRAL ROLE IN THE COMPANY'S CYCLES OF PRODUCTION. THE PROFESSIONAL AND PIONEER R&D EXPERTS IN KRONE GLOBAL, WHO ARE SOLVERS OF SOPHISTICATED TECHNICAL AND TECHNOLOGICAL CHALLENGES, ARE RESPONSIBLE FOR DEVELOPING NEW PRODUCTS AND SERVICES COMPLIED WITH HIGHEST WORLDWIDE STANDARDS, USING THE LATEST METHODS AND EQUIPMENT. MOREOVER, KRONE'S R&D EXPERTS ARE CAPABLE OF OFFERING SOLUTIONS TO ENHANCE THE PERFORMANCE OR MODIFY KRONE'S CURRENT PRODUCTS TO MAKE SURE THEY CAN MEET THE REQUIREMENTS AND NEEDS OF OUTCUSTOMERS IN THE INDUSTRY

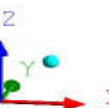
IN OUR RESEARCH AND DEVELOPMENT DEPARTMENT, WE ARE DEVELOPING INDEPENDENT OF THE DAILY BUSINESS, THE INNOVATIONS OF TOMORROW - MANY NATIONAL AND INTERNATIONAL KRONE PATENTS ARE IMPRESSIVE PROOFS OF THIS. OUR TEAM HAS LONG ESTABLISHED RELATIONSHIPS WITH VARIOUS UNIVERSITIES AND SCIENTIFIC INSTITUTIONS AS WELL AS WITH MANY CUSTOMERS.



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ENGINEERING & PRODUCTION GROUPS

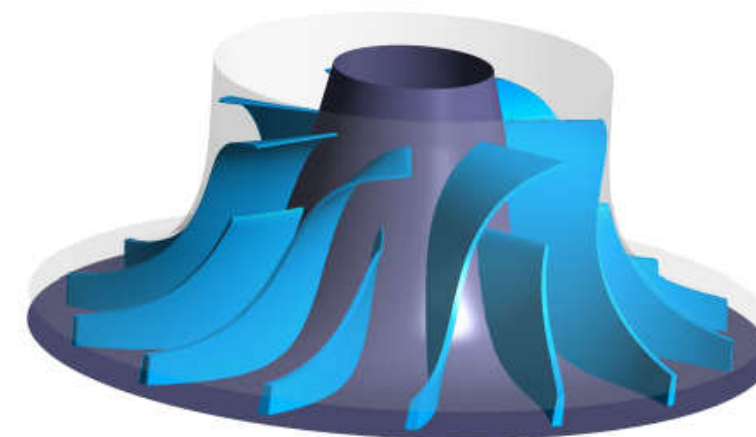
PRODUCTION CAPABILITIES

RESPONSIBILITY OF OUR PRODUCTION DIVISIONS IS TO MANUFACTURE PRODUCTS WITH MANUAL OR CNC MACHINES ACCORDING TO DRAWINGS, TECHNICAL STANDARDS AND OTHER DOCUMENTS PREPARED BY KRONE'S ENGINEERS. SOME OF AVAILABLE EQUIPMENT AND MACHINE ARE AS FOLLOW

5-AXIS CNC MILLING MACHINES, 4-AXIS CNC BORING MACHINES, 4-AXIS CNC MILLING 1100 MACHINES, 3-AXIS CNC MILLING 1100 MACHINES, 4-AXIS CNC WIRE CUT MACHINES, HEAVY DUTY CNC LATHE MACHINES, SCHENCK BALANCING MACHINES AND ETC.

ENGINEERING CAPABILITIES

ENGINEERING DIVISIONS OF KRONE TURN THE SCIENCE PRODUCED BY R&D EXPERTS INTO OPERATIONAL DOCUMENTATION FOR DESIGN, MODELING, PRODUCTION AND QUALITY CONTROL PROCESSES. THEIR OTHER OBJECTIVE IS .TO CREATE A WORK-FLOW FOR KRONE'S TECHNICAL DOCUMENTATION COMPLIED WITH ISO STANDARDS



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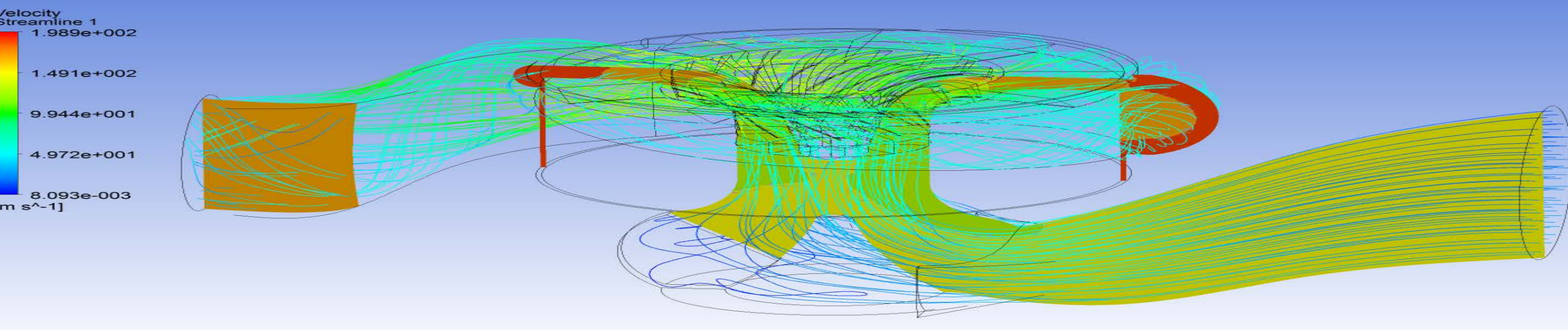


KRONE TURBO GROUP

OUR TURBO GROUP CAN DESIGN AND MANUFACTURE CENTRIFUGAL PUMPS, COMPRESSORS AND FLUID HANDLING SYSTEMS.

KRONE POWER TRANSMISSION GROUP

KRONE POWER TRANSMISSION GROUP IS RESPONSIBLE FOR DESIGNING AND MANUFACTURING .(POWER TRANSMISSION SYSTEMS (HIGH-SPEED, LOW-SPEED AND PLANETARY GEARBOXES



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ASSEMBLY & TEST DEPARTMENTS

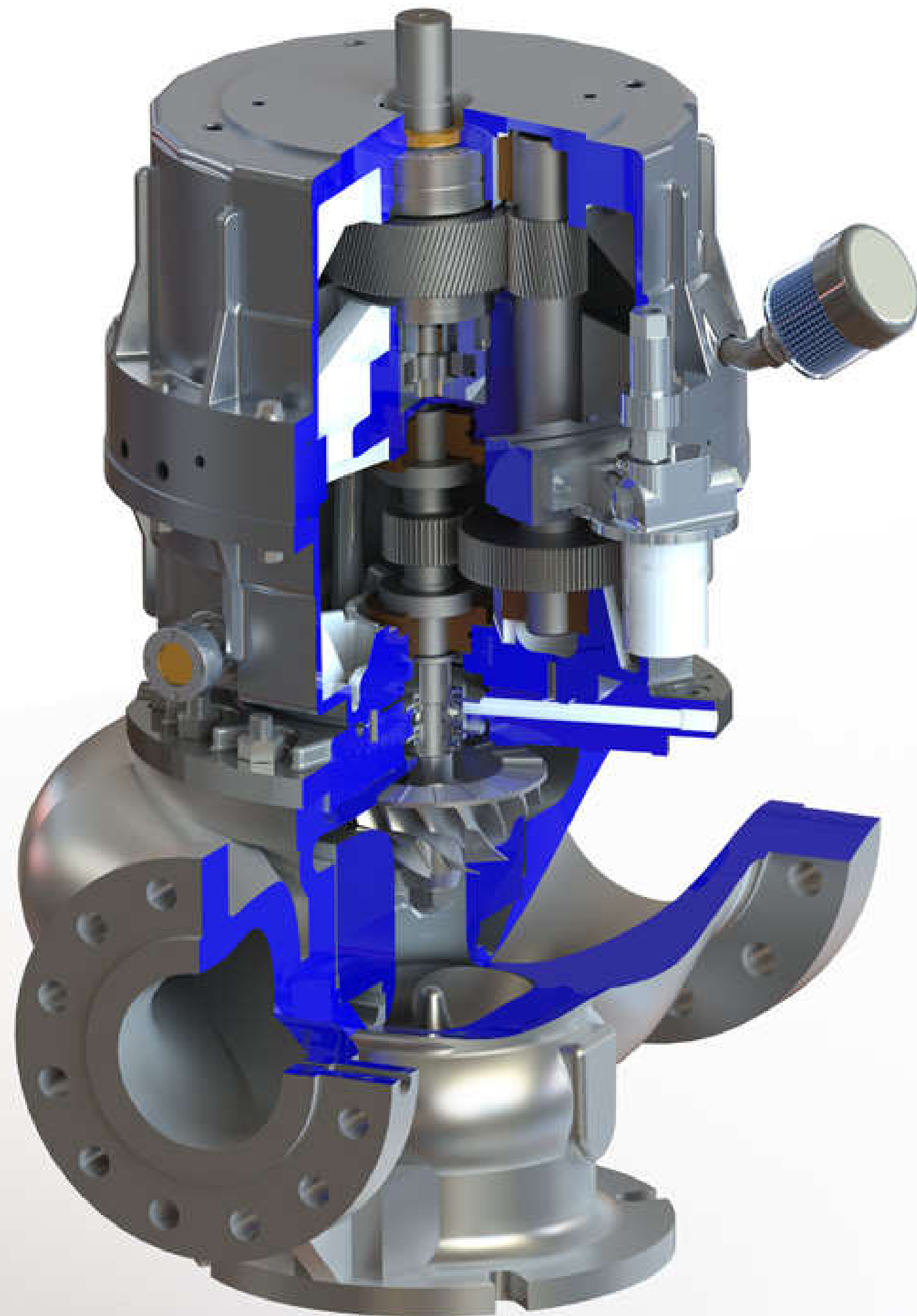
ASSEMBLY DEPARTMENT

EXECUTIVE OPERATIONS OF ASSEMBLY, TESTING, START UP AND MAINTENANCE OF DELIVERED EQUIPMENT TAKE PLACE IN THIS UNIT. PROVIDING SERVICES SUCH AS OVERHAUL AND MAINTENANCE IS CARRIED OUT BY THIS UNIT. THIS SECTION GIVES SERVICES TO OUR TURBO GROUP AND POWER TRANSMISSION GROUP AND PERFORM THE ASSEMBLING AND TESTING IN ACCORDANCE WITH THE PREVIOUSLY PREPARED CHECK-LISTS AND PROCEDURES.

ASSEMBLY & TEST CAPABILITIES OF PROCESS PRODUCTS

ASSEMBLY STATION: INITIAL AND FINAL ASSEMBLY OF PARTS AC-CORDING TO TECHNICAL INSTRUCTIONS, CHECK LISTS AND STANDARDS. **MECHANICAL TEST UNIT:** DEDICATED TO CREATE REAL OPERATING CONDITIONS AND TO OBTAIN THE PERFORMANCE CURVE OF API610 - OH6 PUMPS. IT'S WORTH MENTIONING THAT CONDUCTING TESTS ON CENTRIFUGAL PUMPS WITH HIGH ROTATIONAL SPEED WHICH WORK IN A WIDE RANGE OF DISCHARGE PRESSURE AND FLUID CAPACITY DEMAND VERY SPECIAL LABORATORY EQUIPMENT AND FITTINGS.

FREE-RUN TEST UNIT: RUNNING THE GEARBOX SECTION IN A FREE-LOAD CONDITION WITH ITS PERFORMING SPEED TO CHECK THE PERFORMANCE OF THE GEARS' MESH PATTERN AND ROTARY PARTS.



QUALITY ASSURANCE & QUALITY CONTROL DEPARTMENTS

QUALITY

QUALITY ASSURANCE DEPARTMENT

IN THIS DEPARTMENT THE COMPANY'S NETWORK OF CORPORATE COMMUNICATION IS SUPERVISED TO MAKE SURE THE PROCESS CYCLES OF ROUTINE AND NON-ROUTINE PROJECTS, COMPLY WITH ISO REQUIREMENTS AND STANDARDS.

QUALITY CONTROL DEPARTMENT

KRONE'S QC TECHNICIANS EVALUATE AND CONTROL THE QUALITY OF SPARE PARTS, EQUIPMENT AND OUR PRODUCTS DURING AND AFTER PRODUCTION IN THE FACTORY AS WELL AS OTHER PRODUCTS MANUFACTURED THROUGH OUTSOURCING. THIS SEC-TOR HAS A CRITICAL AND IMPORTANT ROLE IN THE COMPANY AND BENEFITS FROM THE BEST MODERN AND HIGH-TECH MEASURING INSTRUMENTS AND FACILITIES. ALSO IMPLEMENTING CHEMICAL AND MECHANICAL LABORATORY OF MATERIAL IN THE FIELDS OF INITIAL IDENTIFICATION OF REVERSE ENGINEERING PROJECTS AND IN-SPECTION AND QUALITY CHECK OF PRODUCED PARTS ARE PERFORMED IN QC DEPT.

ALL ACTIVITIES OF QC DEPT. ARE PLANNED ACCORDING TO THE ITP (INSPECTION & TEST PLAN) AND QCP (QUALITY CONTROL PLAN) OF EACH PROJECT.



CONTROL

STOCK AND PACKAGING

ALL PARTS AND EQUIPMENT, PRODUCED IN THE FACTORY OR ASSEMBLED AS THE FINAL PRODUCT, ARE STORED BASED ON OUR ISO SYSTEM IN STOCK & PACKAGING SECTION. MORE-OVER, PARTS ARE KEPT WITH SHELL STANDARD SYSTEM OF MESC CODING PATTERN AS WELL AS OUR INTERNAL CODING SYSTEM (KR CODE)

INTERNAL PRODUCT CODING SYSTEM

WITH THE AIM OF MANAGING TECHNICAL DOCUMENTATION A SEPARATE UNIT HAS BEEN ESTABLISHED FOR CODING ALL PARTS AND PRODUCTS. ANY PRODUCT IS DEFINED WITH A UNIQUE INTERNAL CODE (NAMED KR CODE) BASED ON A FIXED PATTERN. FURTHERMORE, IN ORDER TO ESTABLISH AND MAINTAIN EFFECTIVE AND FAST COMMUNICATIONS WITH OUR CUSTOMERS, CROSS-REFERENCE TABLES HAVE BEEN CREATED WHICH ARE IN CORRESPONDENCE WITH OTHER CODING SYSTEMS IN OIL, GAS AND PETROCHEMICAL INDUSTRIES, ESPECIALLY MESC, THAT ARE BEING UPDATED CONTINUOUSLY. THIS SYSTEM FACILITATES ORDERING PROCESS AS WELL AS IDENTIFYING CUSTOMER'S NEEDS BASED ON THE CODES THEY USE.







**FUTURE WILL NEVER
BE THE SAME IN
KRONE GLOBAL**