SPECIALIZED PRODUCT CATALOG · CORRUGATED BOARD & PACKAGING MACHINERY

High-Performance Rotary Joints & Sealing Solutions

Engineered for steam, thermal oil, hot water and cooling circuits on single facers, preheaters, double facers and converting lines.

Seamless Replacement for Global Brands | **Zero Leakage** | **Long Service Life**

XCMG Authorized Manufacturer **ISO 9001:2015 Certified** **15-Day Lead Time**



RTQ Series

Steam · Thermal Oil · Hot Water

350 °C / 2.0 MPa



RT-DE Series

Cooling Water · Compressed Air

5,500 rpm / 1.6 MPa



RT-JG Series

Stainless Steel · Corrosion Resistant

For hard & contaminated water

Xuzhou Ruitus Import & Export Co., Ltd.

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Why Choose Ruitus for Corrugated Lines?

A corrugator is the bottleneck of the whole plant. When a rotary joint leaks, seizes or loses its seal faces, the line slows or stops — so a joint is judged on uptime and cost per running hour, not on its purchase price.

2016	10,000 m²	70+	100%	ISO 9001
Established	Manufacturing plant	Export countries	Pressure & leak tested	Certified system

AUTHORIZED MANUFACTURER

XCMG-branded rotary joints

XCMG Authorized Manufacturer & Strategic Partner

Ruitus is authorized by XCMG to manufacture and sell XCMG-branded rotary joints. Shandong Ruitus Machinery Technology Co., Ltd. is the authorized manufacturing entity; Xuzhou Ruitus Import & Export Co., Ltd. handles global sales and export.

For corrugated customers that means OEM-grade engineering discipline — precision machining, documented quality control from incoming material to final inspection, and traceable test records — at source-factory pricing and lead time.

01 XCMG Manufacturing Standard

Critical sealing faces are machined in-house so tolerance and surface finish stay under control. Every unit is pressure and leakage tested before packing, with records traceable by serial number.

02 100% Direct Replacement

Interchangeable in dimensions and mounting interface with major international brands — Deublin, Kadant / Johnson, Maier. Drop-in changeover: no machine modification, no waiting for adapters.

03 Fast Delivery & Cost Efficiency

Standard models ship within 15 days, cutting safety-stock pressure and the real cost of a stopped corrugator. Seal kits and wearing parts stay available for the service life of shipped models.



Manufacturing plant, Tengzhou



CNC machining of sealing faces



Assembly & finished-stock area

Where Our Joints Work on a Corrugated Line

Steam is the working fluid of corrugated board. Each station has its own pressure, temperature and condensate behavior — and therefore its own joint requirement.

THE CORRUGATOR, STATION BY STATION

Grey = station with no rotary joint

Mill Roll Stand → Preheater → Single Facer → Glue Machine → Double Facer → Dry End & Converting

RTQ Series

Preheater cylinders · Corrugating rolls · Double-facer hot plates

Steam and thermal oil at 0.8–1.6 MPa with roll and plate surfaces of 150–200 °C. The RTQ's patented dual-spherical graphite seal and carbonitrided alloy rotor are built for this duty: high temperature, low rotation speed, continuous condensate exposure.

RT-DE Series

Glue machine · Dry end · Flexo printer & die cutter

Cooling water, hot water and compressed air on the converting side, where the joint turns fast and the media is clean. Forged brass housing, balanced mechanical seal and three drain ports that keep leakage away from the bearings.

RT-JG Series

Hard-water and corrosive circuits · Cooling & hot-water loops

Where plant water quality is poor or condensate is aggressive, the precision-cast stainless housing and all-stainless wetted parts resist scaling and pitting — the direct alternative to Maier DP and Deublin 55.

TYPICAL OPERATING CONDITIONS ON A CORRUGATED BOARD LINE

Station	Media & pressure	Temperature	Recommended series
Preheater cylinders	Steam 0.8 – 1.3 MPa	150 – 200 °C	**RTQ**
Corrugating rolls (single facer)	Steam 1.2 – 1.6 MPa	160 – 180 °C	**RTQ**
Double-facer hot plates	Steam 0.8 – 1.3 MPa	160 – 200 °C	**RTQ**
Cooling & converting circuits	Water / air ≤ 1.6 MPa	≤ 120 °C	**RT-DE · RT-JG**

Maximum pressure, temperature and speed are not simultaneous ratings. The allowable combination depends on port size, media and connection type — send us your nameplate data and we will confirm the correct model within 24 hours.

RTQ Series High-Temperature Rotary Joint

Low-Speed, High-Temperature Rotary Joint · Patented Product

TARGET APPLICATION

Single-facer corrugating rolls · Preheater cylinders · Double-facer hot plates — steam, thermal oil and hot water.

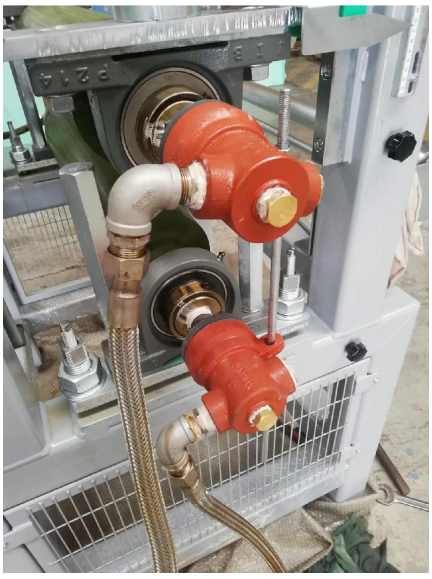


STRUCTURAL FEATURES

- **Patented dual-spherical design.** Developed to overcome the limits of conventional Q-type joints on heated rolls.
- **Integrated guide ring.** Holds superior concentricity between rotor and housing under load and thermal growth.
- **High-temperature seal materials.** Imported antimony-impregnated graphite rings; springs in imported Grade 631 stainless steel.
- **Hardened alloy rotor.** Heat-resistant alloy steel, polished and carbonitrided (nitrocarburized) for wear resistance.
- **Wide margin on corrugator steam.** 350 °C / 2.0 MPa rating against the 150–200 °C, 0.8–1.6 MPa typical of a board line.

TECHNICAL SPECIFICATIONS

Max temperature	350 °C
Max pressure	2.0 MPa
Speed range	50 – 200 rpm
Applicable media	Steam · Thermal oil · Hot water
Seal structure	Patented dual-spherical, self-aligning
Seal ring / spring	Antimony graphite / Grade 631 SS
Rotor	Heat-resistant alloy, carbonitrided
Cross reference	Deublin H-Series / Kadant SX-Series



RTQ units in service on a steam-heated roll.

SIZES, DRAWINGS & MODEL TABLE

Port sizes DN15 to DN65 (R1/2 to R2-1/2), overall dimensions and the quick-change flange option are listed on page 07. Send your duty conditions and we will return the certified drawing together with a quotation within 24 hours.

ASK FOR

Dimensions & model codes

Full RTQ-D and RTQS-G / RTQS-X dimension tables on page 07.

RT-DE Series Water & Coolant Rotary Joint

Interchangeable with 55 / 57 Series · Forged Brass Housing

TARGET APPLICATION

Corrugator dry end and converting machinery — flexo printers, slotter-gluers and die cutters — plus cooling water and compressed air circuits.

STRUCTURAL FEATURES

- **Single or dual passage.** Both designs available, in self-supported or bearing-supported execution.
- **Balanced mechanical seal.** Maintains face load as the seal runs in, compensating for wear.
- **Three drain ports.** Any leakage is discharged away from the bearing, protecting the rotating support.
- **Forged brass, stainless rotor.** Dense, pore-free housing with a corrosion-resistant rotor in the media path.
- **Special options.** Low-torque threaded drain ports; silicon carbide (SiC) balanced mechanical seal.



TECHNICAL SPECIFICATIONS

Max temperature	120 °C
Water pressure	1.6 MPa
Steam (intermittent)	1.5 MPa
Max speed	5,500 rpm (NPT & straight thread)
Applicable media	Coolant · Hot / cold water · Oil · Air
Housing / rotor	Forged brass / stainless steel
Seal type	Balanced mechanical seal
Cross reference	Deublin 55 / 57 Series



RT-DE units installed on a converting machine.

IMPORTANT — STEAM DUTY MUST BE CONFIRMED

The intermittent saturated-steam figure is a rating of the sealing set, not a permission to run 1.5 MPa steam (about 198 °C) continuously inside a 120 °C material limit. Tell us your actual steam pressure and we will confirm the correct seal and spring materials.

ASK FOR

Model & size table

Dimensional drawings, thread / flange sizes and part numbers on request.

RT-JG Series Stainless Steel Rotary Joint

Direct Alternative to Maier DP / Deublin 55 Series · Heavy Duty

TARGET APPLICATION

Paper mills and corrugators running on hard water, aggressive condensate or contaminated cooling water — and every position where brass housings pit or scale.

STRUCTURAL FEATURES

- **Precision-cast stainless housing.** Higher strength and clearly better corrosion resistance than cast brass.
- **External multi-spring, balanced seal.** Uniform elastic compensation that scaling cannot lock up.
- **All stainless wetted parts.** Every internal component in contact with the media is stainless steel.
- **Disc static ring, pin anti-rotation.** Sealing stability and high tolerance of poor water quality; longer service life.
- **Upgradeable on request.** Change bearing size, graphite grade, O-rings or spring material for higher duty.



TECHNICAL SPECIFICATIONS

Max temperature	120 °C
Max pressure	1.6 MPa
Max speed	5,500 rpm
Applicable media	Coolant · Hot / cold water · Oil · Air
Housing	Precision-cast stainless steel
Seal structure	External multi-spring, balanced
Static ring	Disc type, pin anti-rotation
Cross reference	Maier DP / Deublin 55 Series



RT-JG range in stainless steel, various port sizes.

SELECTION NOTE — DO NOT USE ABOVE 120 °C

The RT-JG is rated to 120 °C, so it is the right choice for cooling water, hot water and mild media on the converting and dry end. For steam-heated corrugating rolls, preheaters and hot plates above 120 °C, specify the RTQ Series instead. JG-W dimensions for DN15 to DN50 are listed on page 07.

ASK FOR

Dimensions & model codes

Full JG-W dimension table with bolt circle and thread sizes on page 07.

Dimensions & Model Codes

All dimensions in millimetres. Use this page to check that the replacement joint fits the existing port, thread and mounting space before ordering.

RTQ-D nn / RTQ-D nn-F

Standard high-temperature rotary joint. Suffix F = quick-change flange connection.

RTQS-G nn-m / RTQS-X nn-m

Rotating internal tube for condensate discharge from heated rolls. G and X are the two internal-tube structures; nn = nominal size, m = internal tube size.

JG-W nnA

RT-JG precision-cast stainless steel series, water / coolant execution. nn = nominal size.

RTQ-D · STANDARD HIGH-TEMPERATURE ROTARY JOINT

Size DN	Model	A rotor thread	C stator thread	ØE body	H	L3	L5 overall	Flange (F)
15	RTQ-D15	R1/2	Rc1/2	83	61	91	118	—
20	RTQ-D20	R3/4	Rc3/4	83	61	91	118	F
25	RTQ-D25	R1	Rc1	95	70	108	140	F
32	RTQ-D32	R1-1/4	Rc1-1/4	112	81	125	160	F
40	RTQ-D40	R1-1/2	Rc1-1/2	122	86	138	178	F
50	RTQ-D50	R2	Rc2	152	103	166	212	F
65	RTQ-D65	R2-1/2	Rc2-1/2	172	116	182	242	F

RTQS-G / RTQS-X · WITH ROTATING INTERNAL TUBE FOR CONDENSATE REMOVAL

Size DN	Model G	A	B	C	D	H	L1	L2	Matching X model
15	RTQS-G15-6	R1/2	Rp1/8	Rc1/2	Rc1/2	61	150	137	RTQS-X15-6
20	RTQS-G20-8	R3/4	Rp1/4	Rc3/4	Rc1/2	61	152	137	RTQS-X20-8
25	RTQS-G25-10	R1	Rp3/8	Rc3/4	Rc1/2	70	177	162	RTQS-X25-10
32	RTQS-G32-15	R1-1/4	Rp1/2	Rc1	Rc1/2	81	200	185	RTQS-X32-15
40	RTQS-G40-20	R1-1/2	Rp3/4	Rc1-1/2	Rc3/4	86	221	203	RTQS-X40-20
50	RTQS-G50-25	R2	Rp1	Rc1-1/2	Rc1	103	270	249	RTQS-X50-25
65	RTQS-G65-32	R2-1/2	Rp1-1/4	Rc2	Rc1-1/4	116	305	277	RTQS-X65-32

RT-JG · JG-W STAINLESS STEEL SERIES

Size DN	Model	A	B	C	ØD bolt circle	N bore	H	L1	L2
15	JG-W 15A	R1/2	Rp1/2	Rp3/8	56	13	30	62	82
20	JG-W 20A	R3/4	Rp3/4	Rp1/2	64	17.5	36	73	100
25	JG-W 25A	R1	Rp1	Rp3/4	72	23	40	83	110
32	JG-W 32A	R1-1/4	Rp1-1/4	Rp1	87	31	42	102	140
40	JG-W 40A †	R1-1/2	Rp1-1/2	Rp1-1/4	94	38	46	98	96
50	JG-W 50A	R2	Rp2	Rp1-1/4	117	49	60	202	252

Thread standard: R = male taper thread to ISO 7-1 (BSPT) · Rc = female taper thread · Rp = female cylindrical thread. Other thread forms (NPT, G parallel) and flange connections are available on request.

† JG-W DN40 overall lengths are still being verified against the certified drawing; confirm with our technical department before ordering this

RT-DE Series · size and dimension table

The RT-DE range is supplied in single and dual passage versions across DN15 to DN50. Send us the model you are replacing or your port size and mounting space, and we will return the corresponding drawing and dimensions within 24 hours.

Direct Cross-Reference for Procurement

This table is for purchasing and maintenance managers who need a qualified alternative to established European and American rotary joints — without changing the machine, the piping or the spare-parts schedule.

Global brand model	Ruitus model	Primary application on a corrugated line
Deublin H-Series Kadant SX-Series	RTQ Series	Corrugating rolls, preheater cylinders and steam-heated jackets — high-temperature steam and thermal oil
Deublin 55 / 57 Series	RT-DE Series	Cooling water and pneumatic circuits on the dry end, flexo printers and die cutters
Maier DP Series Premium stainless range	RT-JG Series	Corrosion-resistant duty on hard water, aggressive condensate and contaminated cooling-water circuits

How to Order

1	**Send your data**	Existing joint model and part number, port size and thread or flange type, media, working pressure, working temperature, rotation speed and quantity.
2	**We cross-check**	Our engineering team matches the interface and duty conditions to the correct Ruitus model and confirms any material upgrade the application needs.
3	**Quotation within 24 hours**	A complete cross-reference proposal and competitive quotation, usually within one working day, including lead time and spare-seal kit pricing.
4	**Delivery in 15 days**	Standard models ship within 15 days. Every unit is pressure and leakage tested, with traceable records, before packing.

Cross-reference indicates dimensional and interface compatibility. Maximum pressure, temperature and speed are not simultaneous ratings; the allowable combination depends on port size and media. Verify your duty conditions with our engineering team before ordering.

Ready to Optimize Your Plant's Spare Parts Cost?

Send us your existing rotary joint model name, part number or basic dimensions. Our engineering team will return a complete cross-reference proposal and a competitive quotation within 24 hours.

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Rotary joints · Rotary unions · Swivel joints · Seal kits · Custom engineering from your drawing

ISO 9001:2015 · 100% pressure and leakage tested · Traceable test records · 15-day lead time