

ATRA-FLEX®

Flexible Couplings

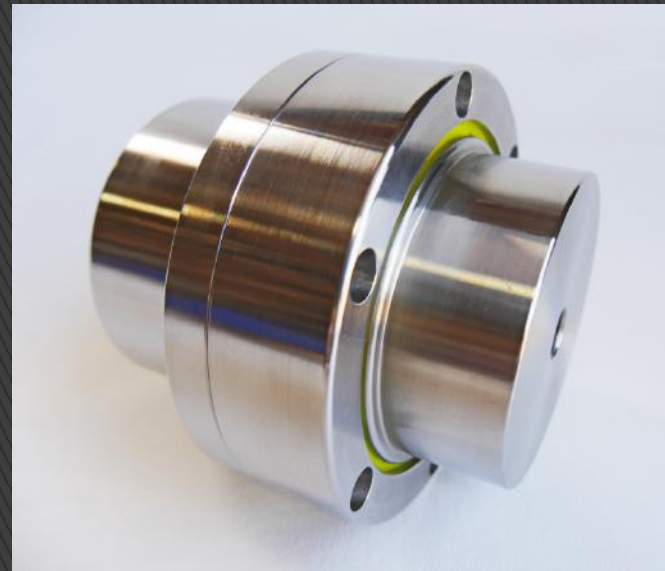


A Series®



Millennium® Series

Quick, Low Cost Solutions for
Rotating Equipment,
Misalignment, End Float and
Vibrational Troubles in the
Power Transmission Industry.



T-FLEX®



Manufactured in USA

ATRA-FLEX around the WORLD

Making Quality Flexible Couplings Customers Depend on Every Day
7 Distribution Centers to Serve You



Corporate Headquarters DC
ATR Sales Inc. 110 E. Garry Ave.
Santa Ana, Ca 1800-443-6613



Canadian Central DC
Winnipeg, Manitoba
800-406-2201



Canadian East DC
Mississauga, Ontario
877-444-6622



Eastern USA DC
Fayetteville, GA
800-777-7159



Regional Office
Lafayette, LA
800-336-2299



Regional Office
North Vancouver, BC
877-984-6423



Caracas/ Venezuela
Representaciones El
Quetazl, C.A.
+58-212-814-9722



Sweden
Jens. Transmissioner AB
011- 461-119-8000



Korea and Japan
Se Chan
Corporation
82-2-2-671-2918

Around the world and in a variety of industries, customers improve their performance by choosing **ATRA-FLEX Flexible Couplings**

Dredging, Pulp and Paper, Oil and Gas, Mining, Pump Systems, Food Processing, Automotive Industry, Steel Industry, Plastic Injection Molding/Extrusion



ATRA-FLEX ~ About Us



ATR Inc. Corporate Headquarters located in Santa Ana, Ca USA has been manufacturing and providing **ATRA-FLEX®** quality flexible couplings to the power Transmission Industry for more than 36 years. We are distributed through our Independent Sales Representatives and our Global Distributor Partners. We are proud to be recognized as innovators in the industry and continue our commitment in offering long term solutions and quality non lubricant flexible couplings that will continue to provide protection on your investment in your driven equipment.



The ATRA-FLEX Way ~ Who We Are



We are a USA manufacturing company committed to adding value by remaining cutting edge in innovation with a strong focus on establishing long term partnerships within the Power Transmission Industry. We strive to remain sensitive to customer needs and determined to find ways to meet or exceed their requirements.

Values

**Quality . Professionalism . Integrity . Efficiency . Precision . Insight .
Customer Focus . Excellence . Experience**



What Are The Benefits of Using ATRA-FLEX Couplings?

- Improved Production Availability
- Improved Maintenance Efficiency
- Maintenance Cost Reduction
- Optimized Maintenance Planning

Quality Manufacturing

Innovation, Precision and Cutting Edge Technology

ATRA-FLEX Couplings are proudly manufactured in the USA.



Standard hubs and rings are machined from solid carbon steel rounds and tubing, maintaining tight tolerances which provides excellent coupling balance. Precision Machined hubs, No castings or forged steel parts.

Stainless steels in grades 303,304 and 316 are also available for corrosive environments and food applications.



Solving Periodic Coupling Failure and the Downtime and Expense that go with it.

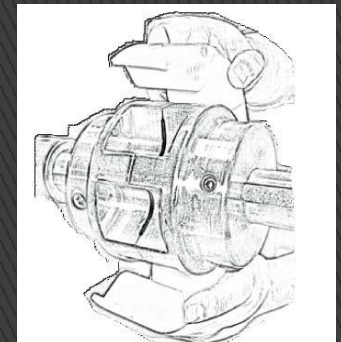
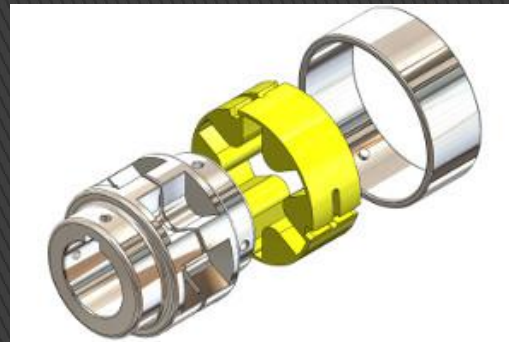
The ease and cost efficiency of using ATRA-FLEX is your Answer

If a new insert is needed, a low-cost replacement can be installed in minutes without moving either the prime mover or the driven equipment.

The compounded polyurethane insert fits between the hubs. When the insert shears there is no metal to metal contact.

No messy lubricants needed = NO EPA regulations.

ATRA-FLEX Couplings will Increase UPTIME

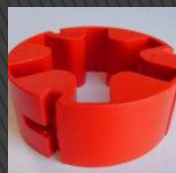
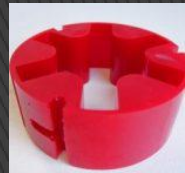


ATRA-FLEX® Polyurethane Inserts

Our custom high quality urethane inserts will save your operation valuable TIME and MONEY

Once inserts shear there is no metal to metal contact saving you money on replacing new hubs.

Standard Inserts have a temperature range from -60°C to 250°F with high temperature inserts available up to 350°F.



Description	Color	Applications	Shore Hardness	Minimum Temperature °F	Maximum Temperature °F
Standard	Yellow	General Purpose	60D	-60	250
High Temperature	Red	High Temperature	90A	20	350
High Torque	Orange	High Torque/Low Speed	70D	-20	250
High Dampen	Brown	Heavy Vibration/Shock Loads	95A	-60	250
Extra High Dampen	Green	High Vibratory Torque/ Shock Loads	90A	-60	250

ATRA-FLEX ADVANTAGE

ATRA-FLEX® means savings in manpower and downtime, easy installation, economy and long, trouble-free service



Lubricated Kopflex Grid Coupling

Messy lubrication, requires maintenance, cleanup is labor intensive and increasing EPA regulations cost you money

DOWNTIME and Costly

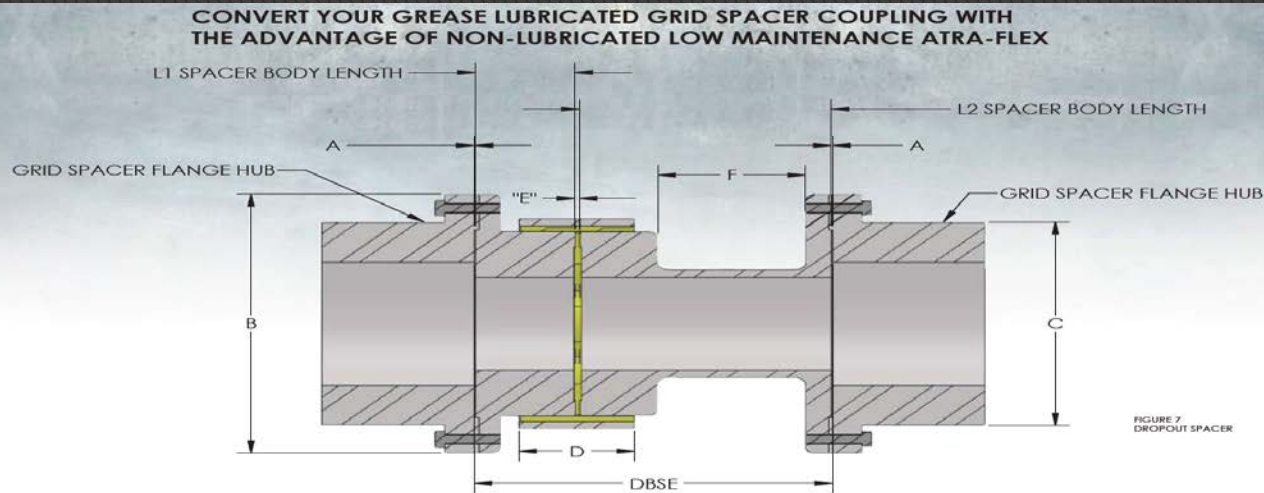


Non lubricated ATR- FLEX Coupling

Quick replacement on insert, Less labor expense

UPTIME and Profit

ATRA-FLEX can Retrofit to Falk Grid Spacers within minutes and save you on Maintenance Cost and Messy Lubrication



DIMENSIONS GRID DROP-OUT CONVERSION CHART

GRID SIZE	SIZE ATRA-FLEX	ANSI STD DBSE	A	B	C	D (RING WIDTH)	F	"E"	L1	DBSE/ =L2	G (BC)
1020 T31	20SB0MF	3.5 4.380 5.00	.050	3.300	2.060	1.145	1.700 2.580 3.200	.075	0.900	3.500 = 2.600 4.380 = 3.480 5.000 = 4.100	2.835
1030 T31	30SB1MF	3.5 4.380 5.00 7.250	.050	3.618	2.340	1.57	0.900 1.780 2.400 4.650	.075	1.300	3.500 = 2.200 4.380 = 3.080 5.000 = 3.700 7.250 = 5.950	3.110
1040 T31	40SB2MF	3.5 4.380 5.00 7.250	.050	4.375	3.090	1.600	0.700 1.580 2.200 4.450	.075	1.400	3.500 = 2.100 4.380 = 2.980 5.000 = 3.600 7.250 = 5.850	3.898
1050 T31	50SB2MF	4.380 5.00 7.250	.050	4.875	3.440	1.600	1.580 2.200 4.450	.075	1.400	4.380 = 2.980 5.000 = 3.600 7.250 = 5.850	3.898
1060 T31	60SB3MF	5.00 7.250 9.750 12.250	.050	5.690	4.060		1.05 3.300 5.800 10.275	.075	1.975	5.000 = 3.025 7.250 = 5.275 9.750 = 7.775 12.250 = 10.275	4.900
1070 T31	70SB4MF	5.00 7.250 9.750 12.250	.050	.000	4.310	3.100	0.900 3.150 5.050 8.150	.200	2.1	5.000 = 2.800 7.250 = 5.050 9.750 = 7.550 12.250 = 10.050	5.275
1080 T31	80SB5MF	7.250 9.750 12.250	.050	7.000	4.800	3.500	1.350 3.850 6.350	.200	3.075	7.250 = 4.175 9.750 = 6.675 12.250 = 9.175	6.000
1090 T31	90SB5MF	7.250 9.750 12.250	.050	8.250	5.620	3.500	1.350 3.850 6.351	.200	3.075	7.250 = 4.175 9.750 = 6.675 12.250 = 9.175	6.000

** Refer to horsepower capacity at various RPM on page 4 and page 18
 *** Consult factory for larger sizes

Tire Style Coupling Comparison



Millennium, T-Flex and A Series transmit rotational torque from one hub shaft to the other in shear, not physically attached to one another



Tire style couplings transmit torque in shear physically attached to a flexing rubber or Urethane

Smaller overall outer diameter, transmits greater torque in smaller package. No guard modifications to retrofit from lubricated couplings.

Precision machined hubs, no casting or forged steel hub parts.

No fasteners on A and M Series.

Reduced moment of weight by flange and twist center moved closer to bearings. Not hanging greatest weight and twist in center of shaft ends on spacer couplings.

No misalignment forces due to no physical connection of hub to flexing element.

No axial loading (shafts being drawn together) due to tire outer diameter growth

Simple element replacement

Drop out spacer to existing shaft hubs

Element retained by outer ring. No steel to urethane bonding or fasteners to fail.

Superior rotational stability. No unrestrained elastomers causing vibration or adverse forces on connecting shafts.

Upon element failure all elastomer is retained behind ring.

Competitive cost of replacement element.

Solving Misalignment, End Float, and Vibrational Problems with **ATRA-FLEX**



Radial/ Parallel

The free movement of the insert accommodates parallel misalignment and still maintains full shock and vibrational damping.

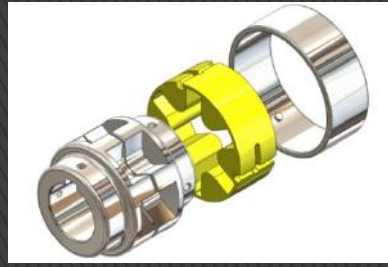
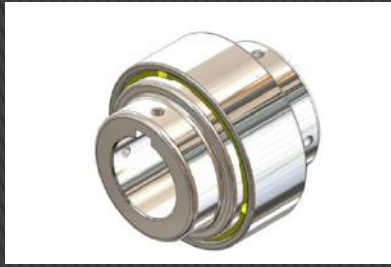
Angular

Insert allows the rocking and sliding action of the hubs without any loss of power through the resilient adiprene insert.

Axial

Atra-Flex insert allows unrestrained end float for both driving and driven members.

ATRA-FLEX Millennium®

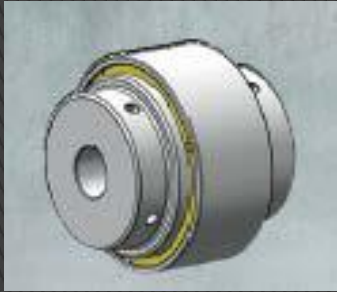


Improved Design from Original A Series- Higher Horse Power in a Smaller Package

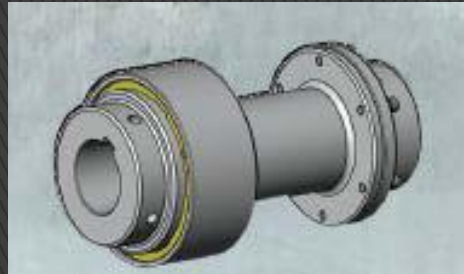
- Detect and Lock-On Ring Feature
- “Internal Support” of Insert for Higher Horse Power
- Higher Horse Power in a Smaller Package
- Large Bore Capacity, up to 16 inch shafts
- No Exposed Shaft on Spacer Coupling
- Very Economical
- Torque Ratings up to 3,610,000 LB-IN



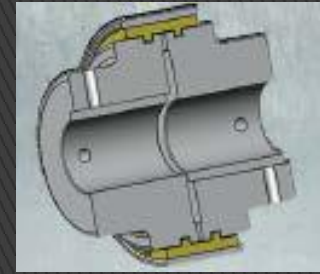
ATRA-FLEX Millennium® Options



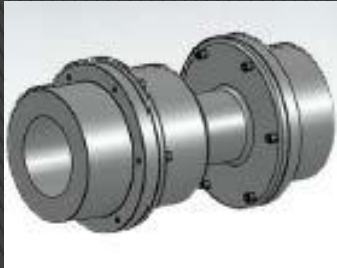
Millennium Non-Spacer



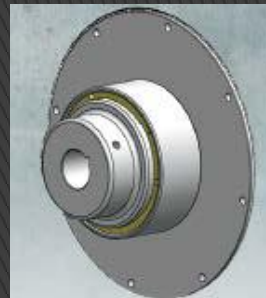
Millennium spacer



Millennium limited end float



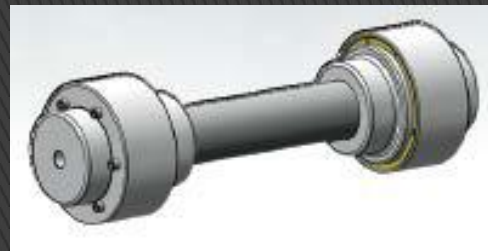
Millennium drop out spacer



Millennium flywheel



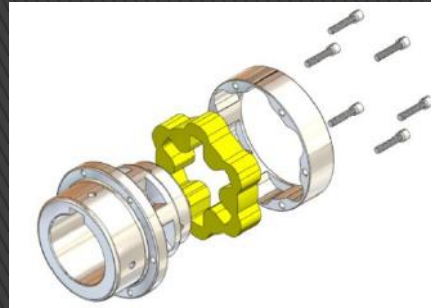
Millennium bushings



Millennium floating shaft

ATRA-FLEX T-FLEX

Patent # 7,244,186

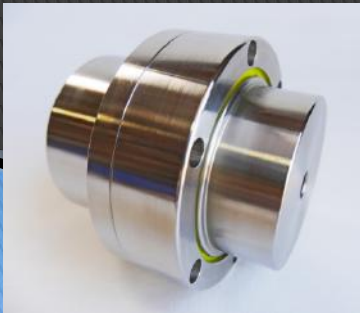


Severe duty, high performance couplings driven on a horizontal Plane . Bolt on ring

Features Patented T-Flex® absorbs extreme torsional shock and vibration while accommodating angular, parallel, and axial misalignment without generating reactionary loads, which significantly increases bearing life.

Application Range T-Flex® coupling sizes available to transmit torque loads from 60 lb-in to over 1,570,000 lb-in with shaft capacities ranging from .375 to over 20.00 running from low rpm to over 18,000 rpm.

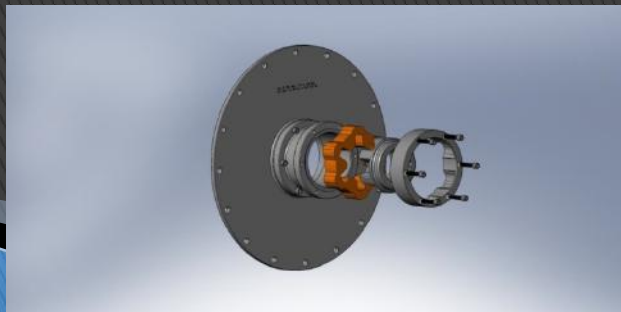
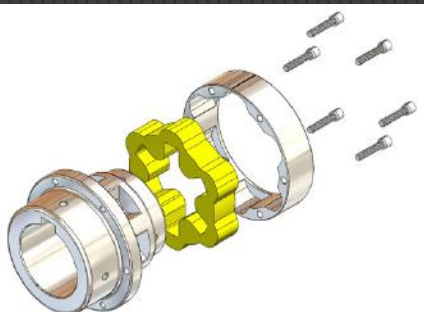
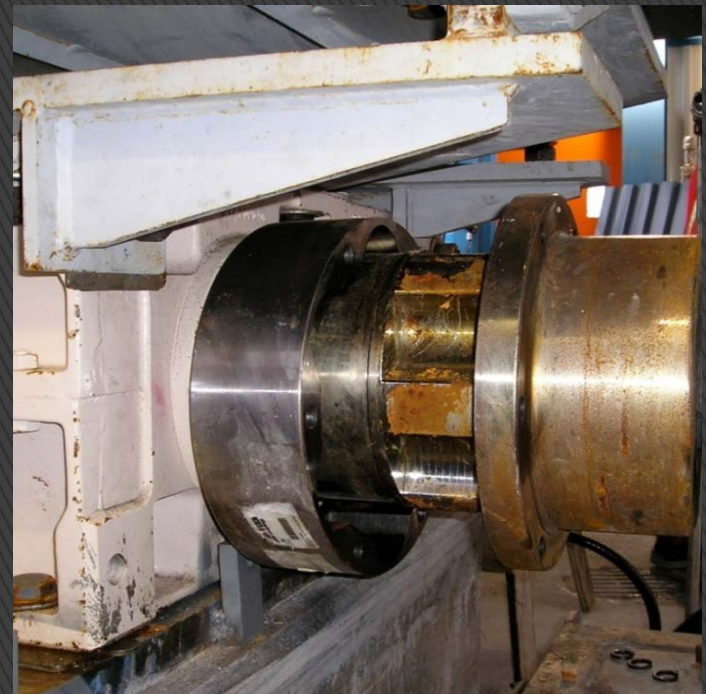
T-Flex® uniquely combines the stability of a compression type coupling with the safety of a shear coupling. In the event of a lockup, the insert will shear, minimizing the possibility of damaging your rotational equipment. No lubrication or routine maintenance is required



ATRA-FLEX T-FLEX

Patent # 7,244,186

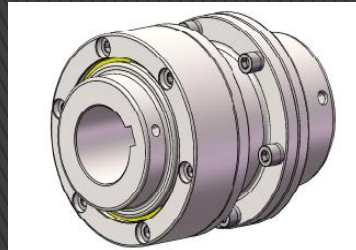
- Bolt on ring
- Flanged hub
- In shear, no metal to metal contact but transmits torque like a compression style coupling
- Lower generated forces= longer equipment life
- No need to move equipment or hubs when replacing insert



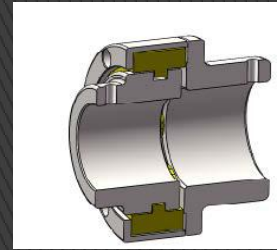
T-FLEX® Options Make it easier to Standardize



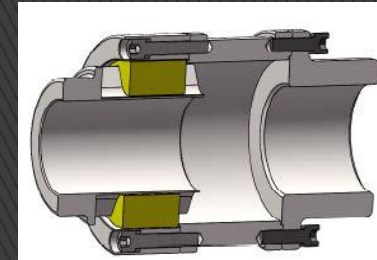
T-Flex Non spacer



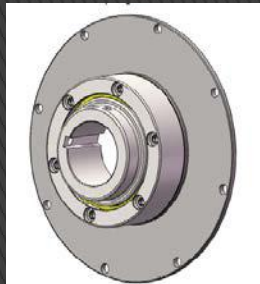
T- Flex Spacer



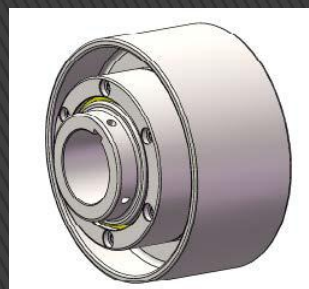
T- Flex unlimited
end float



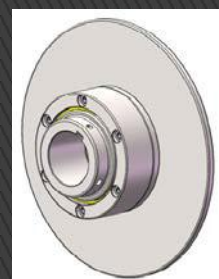
T- flex Axial Slide



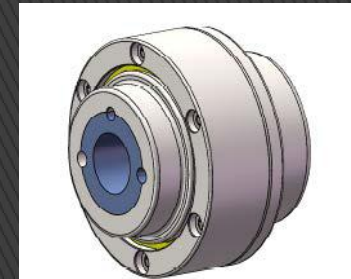
T- flex Flywheel



T-Flex Brake Brake wheel



T-Flex brake disc



T-Flex bushings



T-Flex floating shaft

ATRA-FLEX offers all these advantages

- Change out of coupling insert is faster than any other.
- Initial cost is low and maintenance and downtime are minimal.
- No metal to metal contact between coupling parts.
- Custom Compounded polyurethane inserts provide elasticity and resistance to high torque, shear and shock loads
- May be installed horizontally or vertically; can rotate in either direction.
- A single ATRA-FLEX coupling can be purchased to fit two different shaft sizes
- Elastic insert is highly resistant to humidity, oils, corrosion and chemicals; retains performance characteristics at temperatures from -60°F to 250°F
- High temperature inserts (RED) available to 350°F.



ATRA-FLEX® means savings in manpower and downtime, easy installation, economy and long, trouble-free service

Continually Striving to provide Cost Saving Solutions

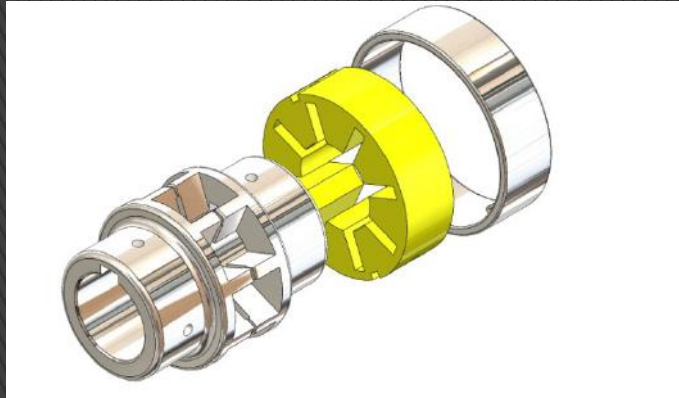
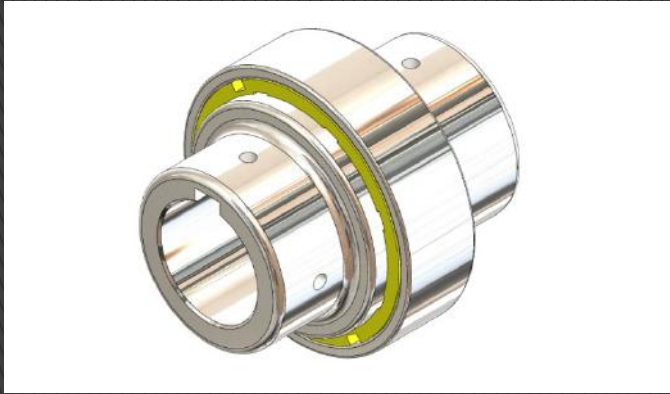
ATRA-FLEX Commitment to meet customer's needs



ATRA-FLEX Melonite® Process offers a significant cost saving and alternative option to Stainless Steel

- *Increased surface hardness up to 57.6 Rockwell C*
- *Lower coefficient of friction*
- *Enhanced surface lubricity*
- *Improved running wear performance*
- *Enhanced corrosion resistance in wet and chemical environments*
- *Suitable for marine environments*
- *Rust resistant*

ATRA-FLEX A Series



Original design. We innovated others followed. Very Economical.
ATRA-FLEX quality vs. knockoff versions

- Detect and Lock-On Ring Feature
- Non-Lubricated
- Replace in Place inserts
- Low Reaction Forces
- Shear Protection
- Very Economical
- Torque Ratings up to 570,000 (IB-IN)

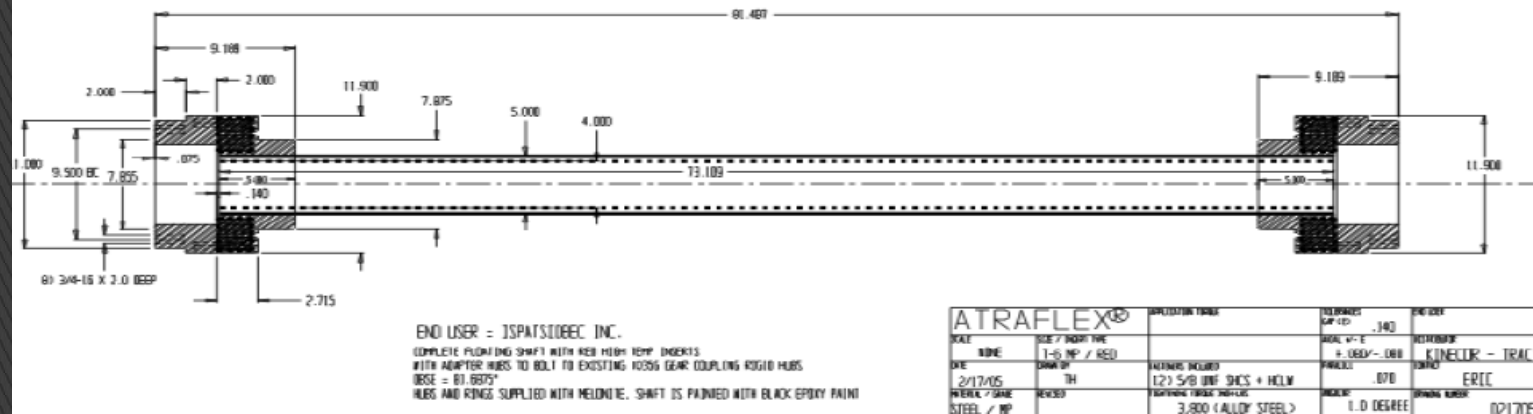
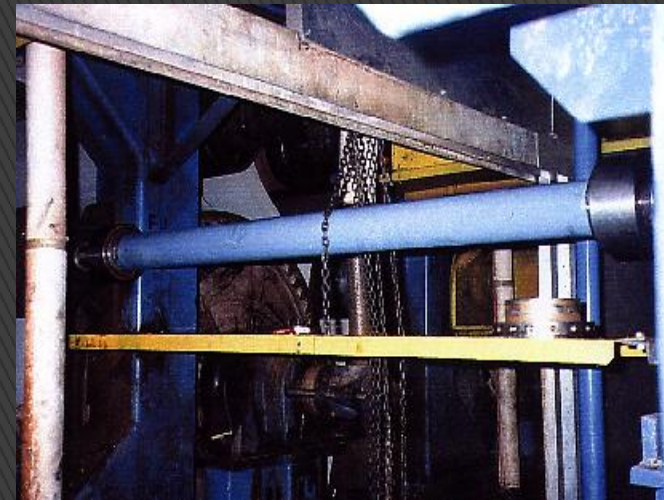


ATRA-FLEX Additional Options

- BORED TO SIZE AT NO ADDITIONAL CHARGE UP TO SIZE 5
- CHOICE OF BORE TYPE
- BORES FOR BUSHINGS
- SHAFT LOCKING SYSTEMS AVAILABLE
- CUSTOM FLANGES, LENGTHS, OUTER DIAMETERS
- BALANCING

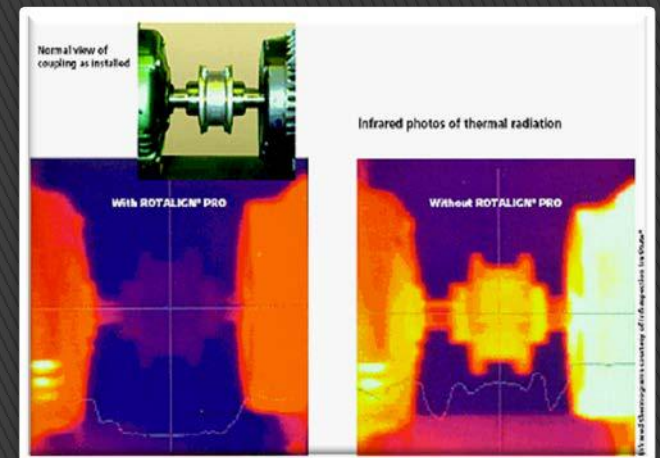
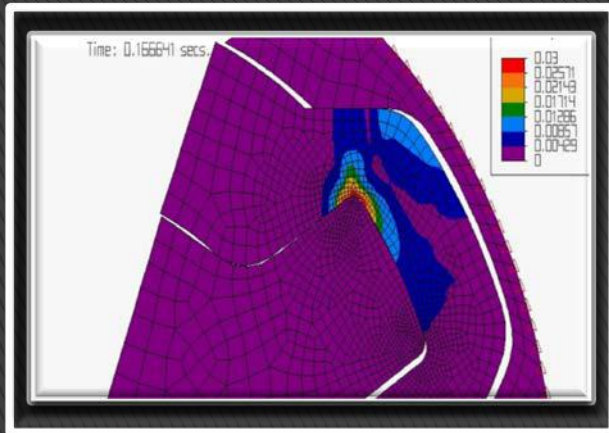
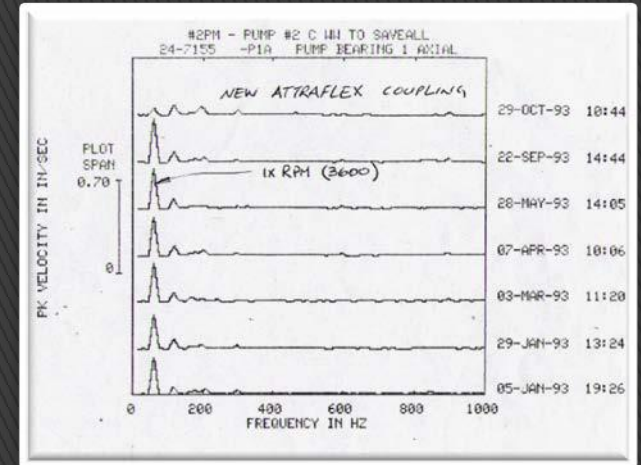
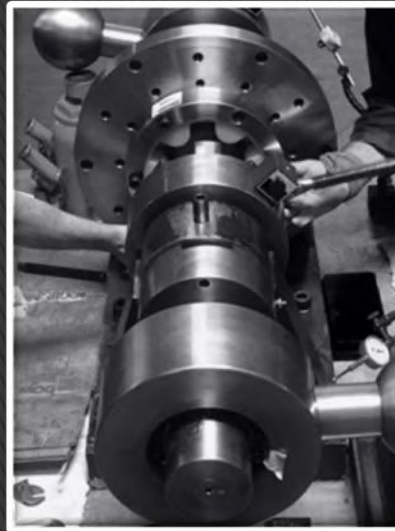


ATRA-FLEX Floating Shafts



HOW **ATRA-FLEX** STAY'S AHEAD

R and D





ATRA-FLEX® is recognized in the industry as the solutions provider. When every minute counts and unexpected downtime is costing the operation money, customers turn to ATRA-FLEX®

Mission Critical Solutions on Rapid Timelines

Downtime can be costly. When 6-10 weeks wait time is not acceptable, customers have come to know and trust the **ATRA-FLEX** commitment to working around the clock to meet their needs. Our focus and dedication to customer satisfaction allows us to adjust our normal production flow to accommodate your downtime crisis when the competitors cannot.

**We are Solution and
Customer Driven**

**Downtime is crucial
ATRA-FLEX® is
your answer**

Large Enough to Handle Your Toughest Application, Small Enough to Care

This is a 25 foot long T-11 Composite Floating Shaft. LEF Melonite Flex hubs on each end that are bonded internally to a two piece composite tube. The tube is then connected in the center to form one large shaft. This particular coupling is running a very large pump that is on a dredge in Africa at a Titanium mine. When the unit is operational, the shaft and pump are tilted at an angle to get the pump side under water. It is usually running at a 30 degree angle. We went with composite on this application simply because a steel tube this long would weigh too much for the equipment at this 30 degree angle. This tube, minus the steel ends only weighs about 250 lbs., but can transfer a tremendous amount of torque.



Mining Industries Rely on ATRA-FLEX
Quality to Keep Operations in Motion

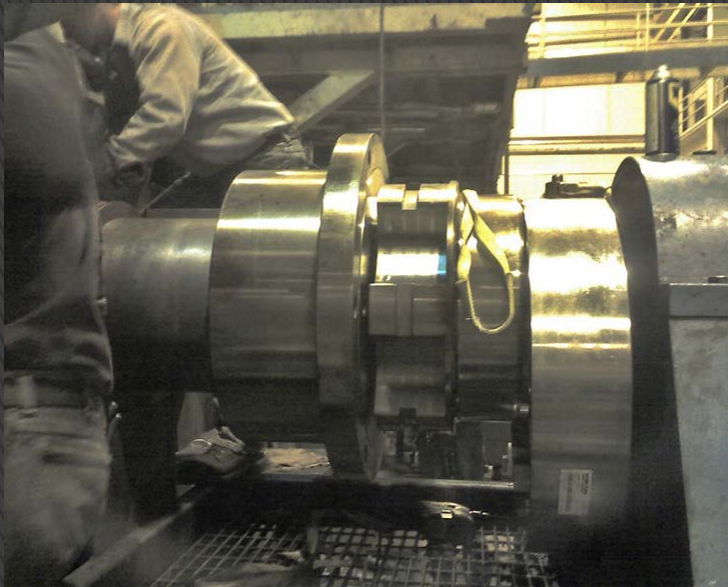


T-FLEX T10 Floating Shaft
for Gyratory Rock Crusher



Paper Mills across the nation EXPERIENCE THE ATRA-FLEX DIFFERENCE

No matter the request, we do it because it's who we are, it's our reputation. Just *ASK*.

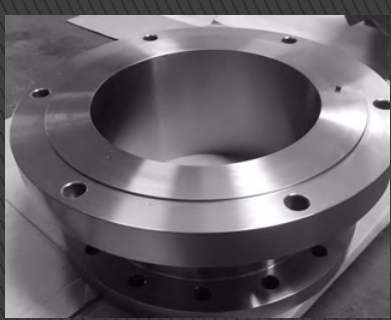


T-Flex T-10 Grinder Application
for Verso Paper, Duluth, MN



T-FLEX T-9 13 Foot Floating shaft that
ATRA-FLEX **RUSHED** delivery on in
2016 for Domtar in Ashdown, Arkansas.
The actual shaft section on this one is 3/4"
wall steel tubing.





ATRA-FLEX® Strives to be a powerful force in the engineering industry, providing superior technical solutions to our customers.



Dedicated to Excellence in Design and Production

ATRA-FLEX® Dedicated to Creating Solutions and Developing Long Term Partnerships

Innovation

Commitment

Quality

Effective and Maintenance free solutions are our focus. We have a full stock of regular duty applications that are ready to ship out but we are dedicated to designing solutions to fit your application demands.

We want to partner with you and be the coupling manufacturer your operations depend on. Please feel free to contact us to speak to an expert on any custom specifications or OEM innovations.





- Improved production availability
- Improved maintenance efficiency
- Maintenance cost reduction
- Optimized maintenance planning



**What does it
mean to you
when you
choose
ATRA-FLEX®
Couplings?**

ATRA-FLEX®

Flexible Couplings