

Powerful products you can trust

Why Indexator is the best choice

1 High-performance
- best total economy

2 Built for hard work in tough environments

3 Compact and robust

4 Reliable vane motors with high torque

5 With heavy duty bearings - hydraulically balanced

6 Thoroughly tested materials and components

7 Good running characteristics

8 Large range of models, sizes, interfaces, etc.

9 Factory tested and quality assured

10 Documented long lifetime

11 Easy to maintain and long service intervals

12 Global network of service providers

13 MPB swing damper - the best brake

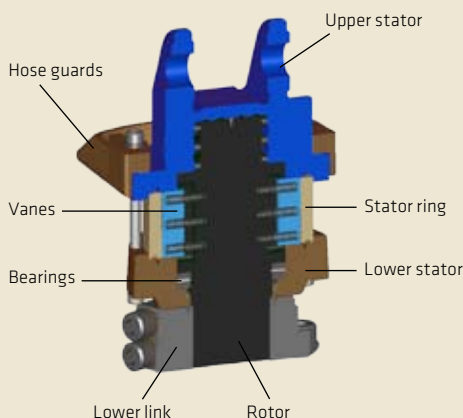
14 Large range of suspension links and swing dampers

15 Crane scales





GV ROTATOR - CROSS-SECTION VIEW

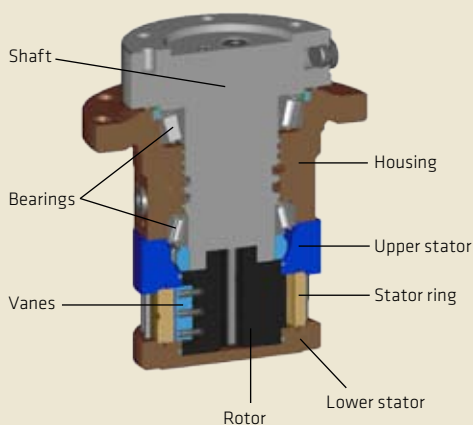


INDEXATOR'S VANE MOTORS PROVIDE ADVANTAGES

Indexator's rotators exclusively use vane motors, which ensures high torque and flexibility. The vane motor's efficiency level is best at the low RPMs that are used in positioning - which is the rotator's primary task.

Indexator's vane motors also have a well-balanced braking ability. Through that, the strain is lower and wear and tear is minimized. The entire machine has a more productive life and the rotator has a longer lifetime.

IR ROTATOR - CROSS-SECTION VIEW



The world's largest selection of rotators

There are large, powerful rotators constructed for the most demanding work tasks. And small rotators for lighter work. Indexator's product range includes the entire scale of rotators in different sizes and models adapted to a series of usage areas:

- Forestry • Material handling • Recycling • Scrap handling
- General cargo handling • Transport • Agriculture

Quality rotators with a long life

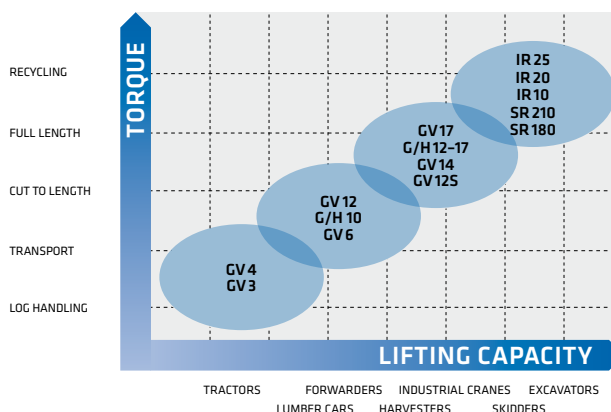
Indexator's rotators contribute to a high level of productivity and good total economy. They are compact and robust - the materials and components are carefully selected. The rotators are equipped with heavy duty bearings and are hydraulically balanced, which gives them long service intervals and long lifetime.

A leading supplier and development partner

Indexator has the world's largest selection of hydraulic rotators and accompanying equipment such as swing dampers and suspension links. The selection also includes hose swivels.

This gives us a unique position that is managed in close cooperation with major machinery manufacturers. Indexator is not only a rotator manufacturer, but also a development partner. Cooperation regarding product development ensures the important interplay between the base machine-crane-rotator-harvester head/grapple/tools.

Quick guide to Indexator's rotators



The diagram shows a schematic image of the usage areas, etc., and can be seen as a guide.

No.1 among the world's rotators

Today, Indexator's GV/AV and G/H rotators are standard on the majority of the world's forestry machines, but not only there. These rotators are also used on cargo truck cranes and cranes for general cargo and material handling as well as recycling.

Quality for the best total economy

WIDE RANGE OF MODELS | Indexator's rotator range includes a great number of size classes and models adapted to different usage areas, different interfaces at the top/at the bottom and different systems solutions for hydraulics.

BUILT FOR TOUGH WORK | Machines, cranes, harvester heads and grapples increasingly perform better – power increases. That is why we build and develop rotators that can handle tough material stress and heavy strain on all vital parts.

VANE MOTORS | The rotators are based on the proven vane motor principle. Indexator's vane motors deliver high torque, are robust and reliable.

HYDRAULICALLY BALANCED | Properly-weighted pressure and flow provide even rotation and stable functions in general – you have full control of your work. No internal hydraulic loads that negatively impact functions and lifetime.

RIGHT CHOICE OF MATERIALS | Carefully tested materials and components ensure good characteristics and sustainability over time.

QUALITY ASSURED | Every rotator is tested individually before delivery. All functions are inspected and ensured.

HIGH LEVEL OF CLEANLINESS | Included parts are washed in different steps during assembly and final testing.

EASY TO MAINTAIN | Simple to change seals and other parts that can wear out. You save time and money.

GLOBAL SERVICE | Efficient spare part provision and a comprehensive network of service providers mean you can rest easy in exposed situations.

BEST TOTAL ECONOMY | Indexator's rotators contribute to a high level of productivity and good profitability – regardless of the type of machine, crane, harvester head or grapple.



GV 3



- 3-ton lifting capacity.
- For lighter forestry and agricultural machines and general cargo handling.
- Light and compact.
- High torque.
- Several alternative designs.

**GV 4
AV 4**



- 4-ton lifting capacity.
- For lighter forestry and agricultural machines and general cargo handling.
- Alternative designs for different swing dampers and link solutions.

GV 6



- 6-ton lifting capacity.
- For lighter types of material handling.
- Light and compact with high level of performance.
- Choose between attachment with a lower link or shaft mounting.

**GV 12
AV 12**



- 10-ton lifting capacity.
- For professional forestry and material handling.
- Robust and durable.
- Alternative designs for different types of routing.
- Lower links in different designs for full tree- or cut to length handling.

GV 124



- 10-ton lifting capacity.
- For tools that need extra hydraulic function.
- Robust, well proven design.
- High-grade material selection.
- Low pressure drop.

**GV 14
AV 14**



- 10-ton lifting capacity.
- Built for tough applications.
- Very low weight in relation to performance.
- Alternative designs for forwarders and harvesters.

**GV 17
AV 17**



- 16-ton lifting capacity.
- Built for heavy tools and hard work.
- Robust and powerful construction.
- High torque.
- Flexible with alternative interfaces for swing dampers/links and tools.



**The world's
most popular
rotators**

G/H ROTATORS



**G 101
H 101**



- 6-ton lifting capacity.
- Mid sized rotator optimized for thinning.
- Durable and service-friendly.
- Powerful upper attachment adapted to MPB swing dampers.
- Low weight.

G 121



- 10-ton lifting capacity.
- For forwarders and material handling with major demands on function and performance.
- Adapted for MPB swing dampers.

G 141



- 10-ton lifting capacity.
- Very high torque strength in relation to weight and construction height.
- Very robust upper attachment.
- Adapted for MPB swing dampers.

**H 121
H 122**



- 10-ton lifting capacity.
- For mid-size single-grip harvesters.
- With an MPB swing damper, provides high productivity and efficiency.
- Durable and service-friendly.

H 132



- 10-ton lifting capacity.
- For harvesters used for heavier thinning and clear cutting.
- Adapted for MPB double swing dampers.
- Powerful upper attachment with robust bearing positioning for long lifetime.

H 172



- 16-ton lifting capacity.
- For felling with high demands on performance, reliability and total economy.
- With an MPB swing damper, provides optimised productivity and efficiency.
- Strong torque and precise.

*"It's trouble-free.
The rotator and brake
do their jobs perfectly
and you don't have to
think about a thing.
It just works."*

Hans-Erik Norell, Via Skog

Heavy duty rotators for jobs in tough environments

Indexator's IR/SR rotators are primarily intended for excavators, large cranes and skidders. These are rotators for the really tough jobs within material handling, recycling and timber handling. Everywhere the demands on rotator function is extremely high.

Withstands extreme axial and radial forces

WIDE RANGE OF MODELS | IR and SR rotators are available in many sizes and models. Alternative mounting and connection possibilities provide great flexibility. SR rotators come in a special version for skidders.

ROBUST ROTATORS | Durable construction – built and mounted to handle both axial and radial loads.

HIGH TORQUE VANE MOTORS | The motors have high torque strength. The modular design together with few moving parts make these rotators durable and easy to service. Documented long lifetime.

BUILT-IN DESIGN | The products are designed to be built into different models of grapples and other tools – compact and well protected.

MODULAR STRUCTURE | Only three main modules: motor, shaft and housing, which together, form a compact body. The modular design also allows mechanical operation, in other words, without the motor.

RIGHT CHOICE OF MATERIALS | Carefully tested materials and components ensure good characteristics and sustainability over time.

QUALITY ASSURED | Every rotator is tested individually before delivery. All functions are inspected and ensured.

GLOBAL SERVICE | Efficient spare part distribution and a comprehensive network of service providers mean you can rest easy in exposed situations.

BEST TOTAL ECONOMY | Indexator's rotators contribute to a high level of productivity and good profitability – regardless of the type of machine, crane and grapple.



IR/SR ROTATORS

IR 10
IR 10-5



- For tough material handling.
- Equipped with heavy duty bearings to withstand axial and radial forces.
- Swivel function with low pressure drops.
- Available also as a mechanical rotator.
- Dedicated models with outlets for attachment of five grapple cylinders – no need for hydraulic distribution block.

IR 20
IR 20-5



- For applications with high demands on function and durability.
- Equipped with heavy duty bearings to withstand loads in all directions.
- Modular structure with few moving parts for greater reliability.
- Dedicated models with outlets for attachment of five grapple cylinders – no need for hydraulic distribution block.

IR 12



- Specially designed for heavier timber handling.
- Modular structure with alternative motor choices.
- Top attachment and links as optional equipment.
- Flexible with X-channel for extra hydraulic functions as an option.

"I started with an IR 2 when it was launched in 1995. After that a whole new rotator world opened up. The rotators are durable, stable, reliable and totally outstanding in the industry!"

Dennis Bergström
Dennis Logistics System AB

IR 22



- Designed for very tough forestry applications.
- High torque for demanding timber handling and optimized function.
- Flexible with the possibility for alternative hose connections.

IR 25



- Designed for tough recycling and material handling.
- Designed with interface for grapple cylinders.
- Strong torque and precise.
- Long lifetime and good total economy.
- Can be directly connected with five grapple cylinders without the need for a distribution block.

SR 180
SR 210



- Specially designed for skidders and full tree handling.
- Very high torque and robust design.
- Service-friendly design.
- Comes in two models, for mid-size and large skidders.



*High torque
Durable
Service friendly*



Reliable swing dampers and links

Indexator offers swing dampers and links for the majority of crane models and usage areas. We have what you need – the selection is basically comprehensive. Our crowning achievement is our in-house developed MPB swing dampers!

MPB swing dampers with multiple-plate brake

CONTROLLED DAMPING | Indexator's MPB swing dampers use reliable disc braking technology, which provides even and controlled swing damping. MPB stands for Multi Plate Brake.

INCREASED PRODUCTIVITY | High braking torque in combination with smooth swing damping shortens the handling time and increases the efficiency.

REDUCED WEAR AND TEAR | The strain on cranes and units/grapples is reduced since the MPB swing damper effectively absorbs the movement energy in the rotator and tools. Reduced wear and tear, fewer impact damages.

BETTER CABIN COMFORT | The flexible braking means that movements are not propagated in the cabin. Ergonomics have been improved, the operation cycles have become more restful.

SERVICE-FRIENDLY | Quick and simple to replace worn-out parts. Easy to clean. Long service interval.

MPB SINGLE SWING DAMPER | Used when there is a need to lower and soften swings in one direction, primarily for light and medium-heavy applications.

MPB DOUBLE SWING DAMPER | The market's most powerful brake. Is used where there is a need to lower and soften swings in two directions. Our MPB double swing dampers are available with either one or two brake packages. Two brake packages delivers extra controlled operation, which means increased productivity.



Swing dampers with disc brake

PROVEN BRAKING TECHNOLOGY | The disc brake swing dampers stop swinging quickly and effectively. Proven technical solution.

SINGLE SWING DAMPER | Used for light and medium-heavy applications where there is a need to lower swings in one direction.

DOUBLE SWING DAMPER | Is primarily used where there is a need to lower swings in two directions.





*Smooth
controlled
damping*



Suspension links – a cast-solid alternative

WIDE RANGE OF LINKS | Indexator has suspension links and attachments for the majority of cranes and rotator models. Links are used when swing damping is not necessary.

CAST-SOLID | Suspension links are cast-solid in one piece and designed for optimal function and durability. With a well-functioning link, less strain is put on tools and rotators. Available in different models, material qualities and price ranges.



Crane scales with or without brakes

INCREASED IMPORTANCE OF WEIGHING | The need of weighing what is lifted with the grapple is increasing – in part for rational value determination of the load, and in part to avoid overloading. Indexator's new crane scales are a further development of our expanding link and swing damper program.

INTEGRATED SENSOR | Crane scales work hydraulically with a built-in sensor that detects pressure changes. The information is transferred to the machine's balance instrument. Indexator's crane scales are available with or without swing dampers.



Hose swivels you can trust

Indexator's hose swivels are constructed for today's modern hydraulic systems. Twisted hoses are totally eliminated, which obviously increases the lifetime of the hose. And another important thing: shorter hose lengths can be used.

Quality swivels – a wise investment

LARGE SELECTION | Indexator's program of high-quality hose swivels include almost everything: different sizes and dimensions, all common thread standards, interior and exterior threading, male/female and male/male models.

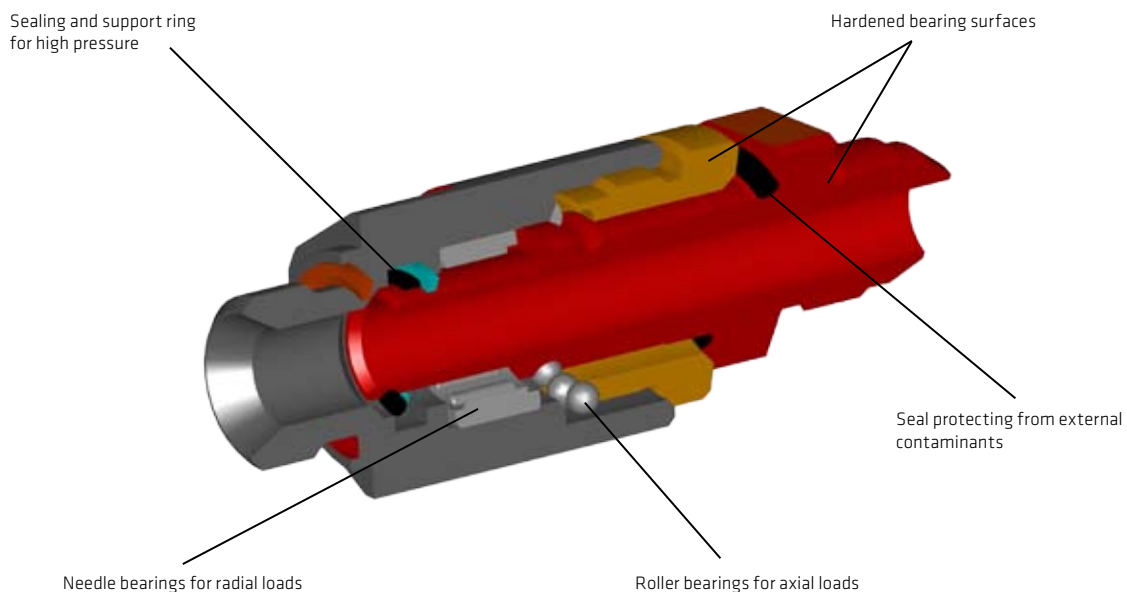
FREE ROTATION | The hose swivels rotate freely and continuously even with extreme pressures. Low friction.

FEWER HOSE REPLACEMENTS | Well-functioning hose swivels extend the lifetime of hydraulic hoses. You save money and have less worries.

SHORTER HOSES | With hose swivels you can be assured that hose lengths can be shortened. In addition to weight savings, you get a straighter and more secure drawing of hoses.

HIGH PRESSURE | Indexator's hose swivels can handle extremely high working pressures for a long period of time.

FULL FLOW DESIGN | No extra friction heat is created that interferes with the hydraulic system.



“A twist of as little as 10 degrees shortens the hose’s lifetime by up to 90 percent. Invest in good hose swivels; it will pay off.”

Håkan Österud, AMAB Hydraul

**Eliminates
twisting
of hoses**



World-class product development

Indexator is leading the technical development – that is our hallmark and success. Being first with what is new is conditional on solid knowledge about the often tough realities that the products will work in and also about being sensitive to new needs.

Technological edge and refinement

Indexator's designers have two assignments: to develop new products and to take the existing ones a step further. It is about gaining the next technological edge and refining and expanding the existing product range.

The development work is carried out in close cooperation with machinery manufacturers, suppliers and end-users – the contact is trustful and made regularly.

Reality shows what is needed and breeds ideas. We bring the ideas to life.

Research and testing facilities

One of Indexator's strengths is a unique research and testing facility that is used to

- systematically verify the products' design.
- to strengthen production methods.
- to test and evaluate new technical ideas.

Quite literally, this is applied research – the result can immediately be put into practical usage. Our material experts, designers and production technicians work side by side.

*Indexator
first with
the latest*





“My experience is that the end customers are very satisfied with the function, quality and the value they get out of Indexator’s products. Indexator develop the products that the customers request.”

Richard Gordon, William Clark & Son

Customer-unique product development

Indexator offers customer-unique product development of rotators and accessories.

This is a growing operation. International machinery manufacturers turn to Indexator to develop, for example, a new rotator model or a function based on a stated requirement and cost specification. The size of the assignment varies, as do the types of cooperation.

This type of order assignment is conditional on regulated contract conditions and protected by absolute confidentiality.





Indexator – the quality factory

Quality is what characterises Indexator. Everything we do is governed by delivering the best quality possible. Our rotators shall always, at the very least, meet our customers' requirements and expectations. Production technology is important, but it is the employees who have the lead role in the quality work.

Everything under one roof

Indexator's production facilities are located in Vindeln, outside of Umeå in northern Sweden. The 8,500 square metre production facility for rotators shares space with corporate management, product development, sales and after-market support.

This closeness provides advantages in the form of an overview and short decision-making channels.

That is why Indexator is able to meet the market's demands on both developed functionality and fast deliveries.

Competence and commitment

Indexator's rotator factory is designed for rational flows and high capacity utilisation. In the centre is the completely automated material handling system, FMS, and advanced processing machines. But what is most important are the people, our employees.

The collective competence and commitment of our employees is what allows Indexator to live up to the name "quality factory".

Our quality work is based equally on participation and personal responsibility in accordance with the rule "anything I send further has to have the right quality level". This means that the person who discovers a problem solves it. The person who discovers a system error reports it.

Or put simply: every employee shall look at the product through the eyes of the customer.



“For us as retailers and service providers, it is a strength to work with a supplier like Indexator. We know that end-users demand both the best quality and the best total economy. Indexator offers all this.”

Reiner Reichert

Reichert Hydraulik & Baumaschinen-Service

Full-scale testing

Everything is not automated. Preliminary and final assembly is done by hand in order to ensure quality and configuration.

All rotators undergo a test cycle where all functions are checked. Testing is completely automated to avoid human influence, but is monitored by an operator. No deviations are tolerated.





Quick spare part distribution and local service

Indexator's rotators are designed for tough work and long life, but sometimes parts have to be replaced. When that happens the customer wants the parts fast!

Indexator is there

Indexator has developed an efficient system for global spare part provision and service in close proximity to customers. This can be organised in different ways - every market area has its own prerequisites.

But the goal is always the same: to quickly get the ordered spare part in order to minimise downtime and lost revenue for the customer.

That is why Indexator works with a network of service providers, which means that help is always close by. The workshops keep spare parts in stock, primarily items that can be worn-out, but they also have complete rotators and accessories.

Indexator provides the service providers with up-to-date service literature, repair handbooks, spare part catalogues and also provides training (Indexator Service School, see next page).

Qualified technical support

Indexator provides technical support via telephone and e-mail. A staff of experienced employees with major product knowledge accepts questions and orders from customers and workshops.

Technical support is an in-house function that has the entire rotator factory behind it. The support workers have close contact with other product specialists and can - most importantly - quickly share new knowledge with designers and other key personnel.





Indexator Service School, ISS

Closeness to professional service is an important element in the selection of rotator. That is why the Indexator Service School (ISS) exists. Here, occupational service technicians are trained in repair and maintenance service for Indexator's rotators. The training is global and leads to accreditation.

Trains accredited service technicians throughout the world

Indexator Service School offers qualified further training of service technicians who repair and service Indexator's rotators. Course participants come from specialist repair shops affiliated with machine retailers in different countries, but also from independent service providers.

As a rule, the ISS training is carried out at Indexator's production facilities in Sweden. For practical purposes the training can also be held in another country.

What is central to the structure is an adapted curriculum, in other words, that the training is tailor-made for those models that are available in the respective geographic market as well as being based on participants' previous knowledge.

Indexator Service School annually trains a large number of accredited service technicians in regard to rotators. Interest in the training is constantly growing.

ISS is a two-stage rocket

ISS training is usually carried out in two stages. The first part of the course lasts 2-5 days and the second lasts 1-3 days, and it can be an advantage to wait a year or two between the two phases.

After a theoretical introduction (product knowledge, help resources/tools, repair handbooks, etc.) the training moves to practical exercises with elements such as a function test, error identification and the identification of the cause of the errors.

The course concludes with a practical final test, summary and course evaluation. The participants are awarded a diploma as a sign of personal accreditation to work with Indexator's rotators.

