

# THE INTRA FAMILY



The SAF INTRA is available both with disc brake and with drum brake

## Efficient and without compromises

The INTRA family has set new standards – both at home and on an international level. Today, after having been proven and tested millions of times, it is distinguished by its particularly high economic efficiency. Precisely matched to the specific transportation task, INTRA provides – in its different versions – ideal and above all safe solutions for the 9t range. And does so regardless of which area of application is required – for less wear and tear and more planning reliability.

# ONE UNIT – MANY VARIANTS AND APPLICATIONS ...

Especially protected due to its position in the functional suspension arm: the shock absorber



The patented SAFE-GUARD-DESIGN of the functional suspension arm protects the brake cylinder reliably from damage

Long-term conservation of value and functional safety through sophisticated cathodic dip coating with optimum corrosion protection down to the last detail

Functional suspension arm and axle tube form an inseparable and maintenance-free unit. This eliminates the need for U-bolts, clamping plates and nuts. The entire design is extremely robust and yet very lightweight

# SAF INTRADRUM



**Perfectly thought-out: The SAF INTRA drum brake combines proven components into a successful system.**

Efficient, profitable and virtually maintenance-free – the SAF INTRADRUM is a winner with its powerful and precisely matched components and guarantees planning reliability right from the first kilometre.

## BENEFITS AT A GLANCE

### Improved corrosion protection

by **galvanising and powder coating**, the **cover plate** is even better protected. In order to increase the corrosion protection of the INTRADRUM even more, the **coating thickness on the wheel hub has also been doubled.**

### The use of steel-brass S-cam bushings

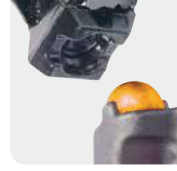
allows for more accurate manufacturing tolerances compared to synthetic bearings, so that **they can be installed with almost no play, less vibration** and a **better brake performance**. Noise generation is also significantly reduced.

### SAF brake shoes

are **asymmetrically shaped by computer modelling** and are subject to strict production control on an ongoing basis. The **optimised brake shoe geometry** guarantees improved distribution of force between brake pad and brake shoe, **improving brake performance.**

### Spherical bearing

The brake shoes on the SAF INTRADRUM are mounted around a spherical head. Thanks to their special geometry, the shoes can move in all directions. This will cause the force to be more evenly distributed across the linings, and a longer service life is guaranteed.



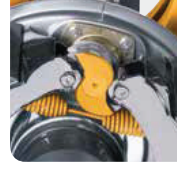
### Replacing brake shoes in seconds

The change is quickly done with a screwdriver and only a few simple manual actions.



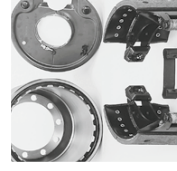
### Precise cam roller guide

The precision-machined S-cams precisely control the movement of the brake shoes and the contact pressure, so optimal braking action is ensured.



### Fewer parts

The SAF INTRADRUM saves space in storage and considerably reduces the effort involved in maintenance and repair.



# OPTIMONS

ABS SENSING

SAF TWO-SIDE AXLE LIFT

SAF ONE-SIDE AXLE LIFT

SAF KILOMETRE COUNTER

SAF TIRE PILOT

BRAKE CYLINDERS

SAF UP TRAIN LOADING SYSTEM

PAD WEAR SENSING

SAF PROTECTOR SHEET

SAF PC PREMIUM COATED

SAF REINFORCED AIR SPRINGS

# OPTIONS FOR THE AXLES

PRODUCT	SAF ABS SENSING	SAF TWO-SIDE AXLE LIFT	SAF ONE-SIDE AXLE LIFT	SAF HUBODMETER	SAF TIRE PILOT	SAF BRAKE CHAMBERS	SAF UP TRAIN LOADING SYSTEM	SAF PAD WEAR SENSING	SAF PROTECTOR SHEET	SAF PC PREMIUM COATED	SAF REINFORCED AIR SPRINGS
DESCRIPTION	- exciter ring and sensor holder (as standard/pre-assembly) - can be activated using simple and reliable plug connections	- for 22.5" wheels - only weighs approx. 21 kg per axle - very simple retrofit	- specifically for low ride heights - only weighs approx. 30 kg - very simple retrofit	- measures the exact mileage of trailers - simple retrofit - quick and reliable mounting	- tyre-inflating system for trailers and semi-trailers - monitoring and preservation of the set tire pressure in the trailer	- completes surface coating - high-quality internal components - fully integrated air connections	- one of the lightest train loading suspension on the market - springs not clamped during rail loading	- simple retrofit - can be connected to the Trailer ABS or to a separate control and display unit	- protects the brake disc against stone chipping and other foreign objects	- with our new 3-layer coating protection with up to 50 % Zinc content - very high corrosion protection	- with steel plungers for extreme loads
AXLE											
SAF INTRADISC PLUS INTEGRAL	X	X	X	X	X	X	X	X	X	X	X
SAF INTRADISC AIRVENT	X	X	X	X	X	X	X	X	X	X	X
SAF INTRADRUM	X	X	X	X	X	X	X	standard	standard	-	X
SAF INTRA CD DRUM	X	X	X	X	X	X	on request	-	standard	-	X
SAF INTRA CD DISC	X	X	X	X	X	X	on request	X	X	X	X
SAF INTRA CD TRAK	X	-	-	X	-	X	-	X	X	-	X
SAF INTRA MEGA	X	X	X	X	X	X	X	X	X	X	X
SAF INTRA SELF-STEERING AXLE	X	-	-	X	X	X	X	X	X	-	X



TRAILER AXLES AND  
SUSPENSION SYSTEMS



COUPLING AND LIFTING  
TECHNOLOGIES



SUSPENSIONS FOR  
TRUCKS AND BUSES



SUSPENSIONS AND COMPONENTS  
FOR COMMERCIAL VEHICLES



V. ORLANDI

COUPLING AND LIFTING  
TECHNOLOGIES



TRAILER AXLES AND  
SUSPENSIONS SYSTEMS