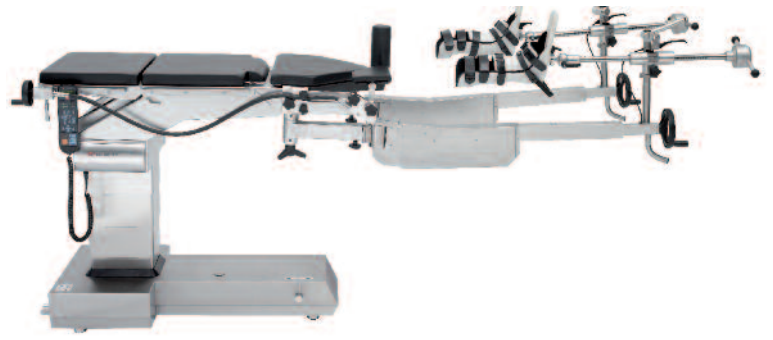
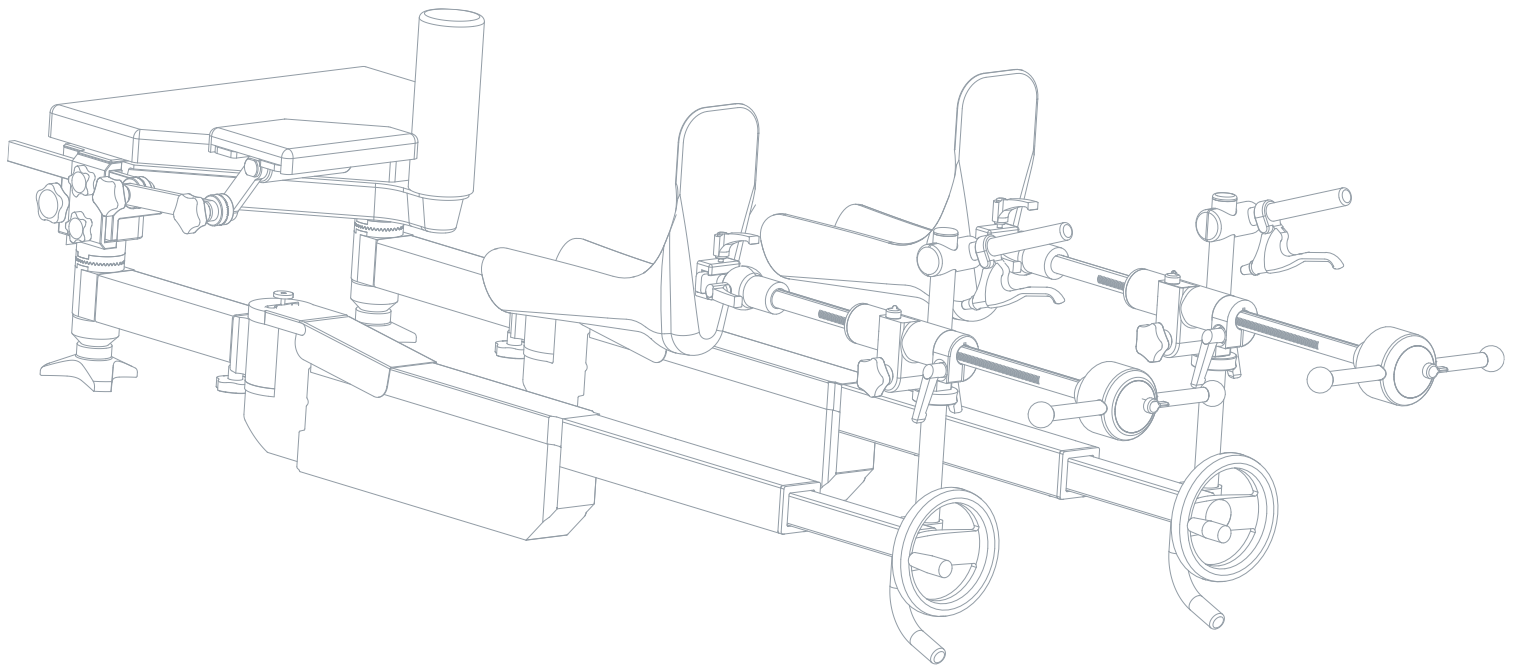


# SCHAERER MIS- EXTENSION



INNOVATION FOR  
MINIMALLY INVASIVE HIP SURGERY



# SCHAERER MIS-EXTENSION

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## SCHAERER MIS-EXTENSION INNOVATION FOR MINIMALLY INVASIVE HIP SURGERY

The Schaerer MIS-Extension is a flexible, easily operable instrument for assisting in minimally invasive surgery with the main focus on hip surgery. The instrument allows the positioning of the lower extremity as required in regard to the surgery practice and therefore is especially adapted to ensure safe and efficient procedures.

Already after a short introduction the system enables competent handling thanks to its state of the art ergonomics. As a result of its novel kinematic concept, it reduces the risks of minimally invasive operations and makes the controlling and the overview of the operating field easier for the surgeon during the whole operating procedure.

With the development of this innovative extension- and positioning instrument, Schaerer Medical AG provides a support system aligned to the particular requirements of gentle orthopaedic surgery, which is also capable of being expanded for applications beyond hip joint surgery.

The Schaerer MIS-Extension (patent pending) has been developed in close cooperation with experienced Swiss orthopaedists and surgeons on the basis of a new kinematics concept.

MIS (Minimal Invasive Surgery) designates a muscle protecting procedure in surgery on the hip joint. The objective is the minimisation of damage to the pelvic-trochanter musculature.

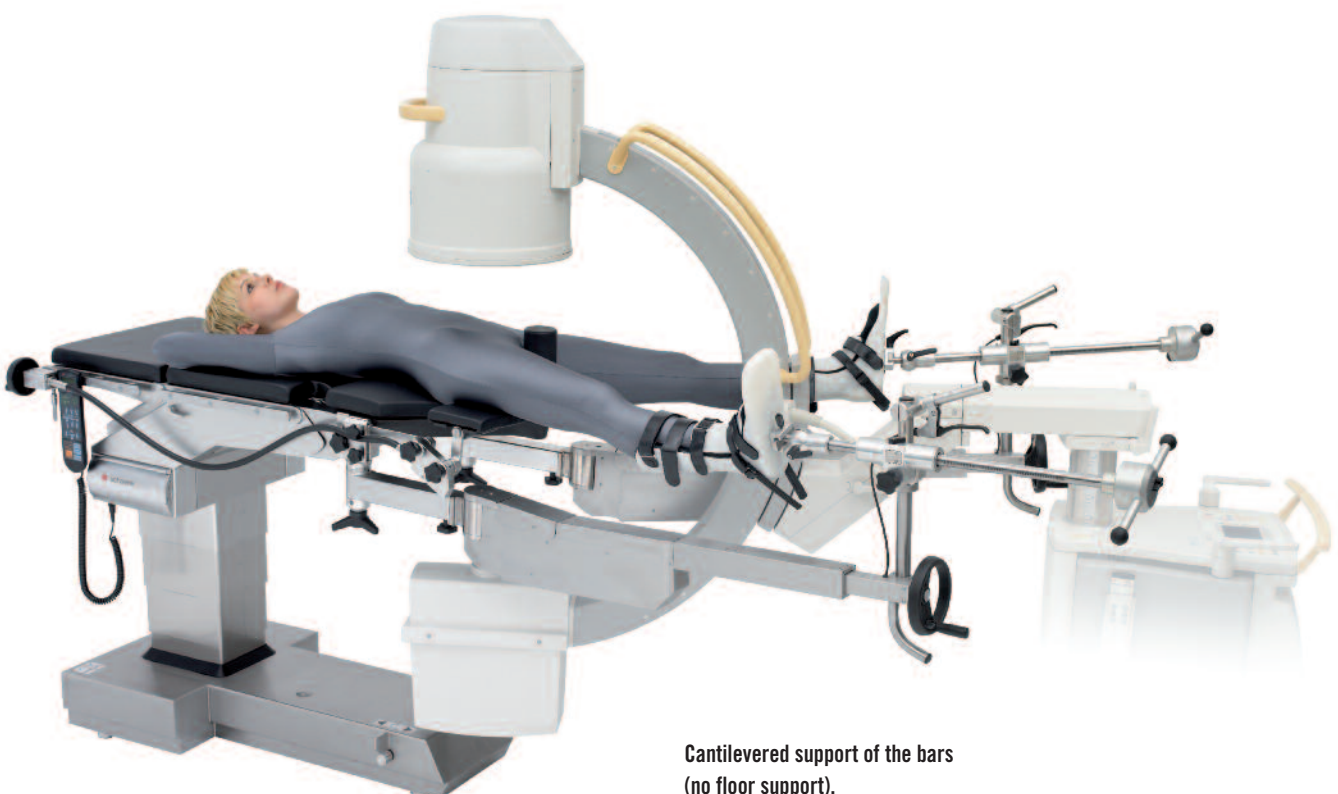


During the operation the operator can activate all important functions with one hand only. The Schae-  
rer MIS-Extension can easily be locked and released  
for the rotation in any position with the thumb.

The Schaerer MIS-Extension enables the operator to  
face the increasing demands regarding minimally in-  
vasive procedures. It assists both a gentle patient  
bedding as well as an easy to operate application.



Easy one-hand operation



Cantilevered support of the bars  
(no floor support).

# SCHAERER MIS-EXTENSION

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The especially shaped seat plate made of carbon fibre material enables an unobstructed imaging with the x-ray image intensifier.

Well padded extension shoes adaptable with regard to firmness guarantee a good hold and minimised pressure points.



## SIMPLE AND SAFE INSTALLATION AND DISMANTLING

The rapid and secure attachment of the Schaerer MIS-Extension is installed with the help of the practical supporting - and attachment trolley. The trolley has been developed in conjunction with OP -

and positioning personnel to enable the convenient and secure installation of the extension directly from the trolley and assures the correct storage of the extension as well as of the necessary accessories.



## THE ADVANTAGES OF THE SCHAEERER MIS-EXTENSION

- Extension and foot support operationable with one hand
- Wide operating angle range
- Great freedom of movement for extension and rotation
- Little force required for operating the extension
- Cantilevered support of the traction bar without any obstructing support at the foot end
- Very solid construction
- Easy to be attached to the operating table (with the help of the extension trolley)
- X-ray translucent carbon fibre seat plate
- Adapters for all common operating tables on request

## INNOVATION FOR THE DOCTOR AND THE PATIENT

The new extension system as an accessory for operating tables provides the surgeon and the patient with many advantages for minimally invasive surgeries in the hip area.

### EASY TO HANDLE:

During the procedure, the operator is able to determine and change very accurately the required position of the leg and with one-hand operation only. All movements are to be controlled with a minimum of force required.

### EASY POSITIONING:

The leg is capable of being freely turned, distracted and finally locked in position under high pressure. The traction bar with foot support can be moved over an angular range of 180° in adduction - and abduction direction, in the flexion plane over more than 50°. The high precision mechanics enables the alignment of the leg to be gently adjusted and controlled. Every position can be steplessly held by the mechanics.

### MAXIMUM ACCESSIBILITY:

A further plus for the surgeon is the cantilevered support of the traction bar, which provides great advantages during the procedure as well as when working with the x-ray camera. Because the Schaerer MIS-Extension has no floor support, the leg is completely free and accessible for the operating team from all sides.

### HIGH LOAD-BEARING CAPACITY:

The whole system of the Schaerer MIS-Extension consists of high-grade materials. It operates purely mechanically and does not require any hydraulics or electric motors.

### OPTIMUM ADJUSTMENT POSSIBILITIES:

The most important objective when developing the new extension was to assure a maximum of adjustment possibilities. In addition, the system provides the surgeon with an absolutely unobstructed view over the operating field with optimum stability.

### GENTLE ON THE PATIENT:

The Schaerer MIS-Extension allows gentle on the muscles procedures on the hip joint with reduced stress both for the patient and for the operating team. Thanks to the compatibility of the Schaerer MIS-Extension with the OP-tables of the Schaerer AXIS and ARCUS ranges, the patient can be brought into the operating theatre directly on the operating table. (Adapter for other operating tables on request available).

### FLEXIBILITY:

The same system can also be utilised as a conventional extension in traumatology. This opens up several new fields of application for the operator.

The basic version of the Schaerer MIS-Extension consists of one extension and a thigh support. Depending on the requirements of the operator, it can be complemented by a second extension bar. The space requirement of an Schaerer MIS-Extension is exceedingly little.

## MOVEMENT SEQUENCE WITH THE SCHAERER MIS-EXTENSION



### SCHAERER MIS-EXTENSION - TECHNICAL DATA

Patient size:	1.50 - 1.90 m
Patient weight:	max. 135 kg
Flection:	50° (with gas-lift spring assistance)
Extension:	25° (with gas-lift spring assistance)
Rotation:	with latching function in both directions
Distraction:	force support by means of hand-wheel
Range of adjustment traction bar:	0 - 400 mm
Range of adjustment foot support:	0 - 400 mm
Height adjustment hip support:	70 mm
Latching step joint:	7° per latching (50 positions)
Latching step foot support:	2.5 mm steps
Latching step rotation:	6° per latching (60 positions)
Latching step arm support:	8° per latching (44 positions)

CE according to MDD 93/42/EEC

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