

Product Information – Milestones

In 1961, prompted by the Charnley total hip arthroplasty using methylmethacrylate cement, Müller teamed up with Sulzer company to create his first total hip replacement, modelled after the Charnley system, and using a metal-on-teflon design. The polyethylene cup was introduced in 1963, followed by two femoral components shaped like a dibble in 1964/1965 - the Setzholz Prosthesis - with head diameters of 24 and 32 mm. Müller introduced his own metal-on-metal system in 1966. That was also the year in which his Curved Stem laid the groundwork for his first small but complete implant system. The positive results of his Setzholz Prosthesis paved the way for the timely introduction of his Straight Stem system in 1977. Later, in 1985, the modular Straight Stem was introduced.

Today, 26 years after the first implantation of a *M. E. Müller* Straight Stem, we celebrate the implantation of 1 million original stems.

1964

Setzholz Prosthesis, polyester cup

1965

Metal-metal system

1967

Curved Stem, Full Profile Cup

1977- 1979-

Straight Stem monobloc, standard and lateral, CDH prosthesis,
Acetabular Roof Reinforcement Ring, Low Profile Cup

1985-

Straight Stem modular, standard and lateral, ceramic head

1988-

SL System, metal-metal articulation Metasul

2003



2003

On Wednesday, 19 March 2003, the implantation of the one-millionth *Original Maurice E. Müller* Straight Stem prosthesis performed by Jürgen Radke, MD, at the Red Cross Hospital in Munich took place.

Product Information

1. Sizes

The *Original M. E. Müller Straight Stem* is offered in five different sizes. Furthermore, several intermediate sizes are offered as an option. All sizes are available in standard and lateral version and in Protasul™ -10 as well as Protasul™ -S30.

Normal sizes

7.5

10.0

12.5

15.0

17.5

Intermediate sizes

8.75

11.25

13.75

16.25

2. Offset

The *Original M. E. Müller Straight Stem* was the first implant which took into consideration the importance of different offset alternatives. The aim of Prof. M. E. Müller was to create a hip system that respects the anatomical conditions of the patient. For this reason this system offers two different

options, a standard and a lateralized version.



3 CCD Angle

The CCD angle of 135° remains the same for both versions of the Original *M. E. Müller Straight Stem*.

5 Surface

The surface of the Original M. E. Müller Straight Stem is a fine blasted surface.

6 Grooves

The *Original M. E. Müller Straight Stem* has two main grooves, one in the anterior part and the other one in the posterior part of the stem. The aim of these grooves is to provide reliable stability to the stem, even in cases of insufficient medial support due to osteolysis. The small grooves offer additional help for the mechanical fixation achieved with the cement.



7 Collar

The *Original M. E. Müller Straight Stem* displays a small anterior and posterior collar. The aim of this small collar is to help compress the bone cement. It is important to bear in mind that this collar is very small and does not interfere with the cortical bone. Thus, the resection area can be freely chosen.

