MÜRMANN
GEWINDETECHNIK

# REFERENCE

COMPRESSION STRUT SYSTEM M42

Gamma telescope CTA prototype, Berlin

## PROJECT DATA

Brief description

Compression strut systems for support of telescope mirror

Data system elements

62 compression strut systems, M42 pressure pipe
dimensions 114.3 x 5 mm in different system lengths
Hot dip galvanized design

Technical parameters

Use of compression strut systems to absorb changing pressure forces in a framework structure

Country, Year

Germany, 2017

## DESCRIPTION OF PROJECT

With the gamma telescope CTA (Cherenkov Telecope Array) a new observatory for the observation of cosmic events, such as for example supernova explosions, is to be constructed, with technology of hitherto unknown quality. An international consortium of 1000 scientists, engineers and astrophysicists worldwide are participating in the project, which started in 2010, for land-based gamma ray astronomy. The DESY organization forms the largest group in this consortium and is responsible for the design and construction of the telescope, which have a mirror diameter of 12 meters. A grid made up of several of telescopes on the the northern and southern hemispheres is planned, in order to observe the whole sky. During the prototype phase DESY constructed a telescope prototype of the latest generation in Berlin Adlershof, Germany.

## SOLUTION

m·connect compression strut systems were used for the supporting construction of the telescope mirror. At he moment, measurements are being carried out on a large scale of the whole telescope structure, as well as simulation studies. On cnclusion of all investigations, further telescopes are to be constructed – up to 60 units over the medium term.

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