# DELIVERY RECORD

- Client: INFN-LNF
- Facility: SPARC\_LAB

(Sources for Plasma Accelerators and Radiation Compton with Lasers and Beams)

Location: Rome, Italy

1 October 2018

A MITSUBISHI HEAVY INDUSTRIES MECHATRONICS SYSTEMS, LTD. Machinery Systems Sales Department



#### OUTLINE



MHIMS0115013

- 1. OVERVIEW
- 2. S-BAND ACCELERATING STRUCTURE

#### **1. OVERVIEW**



MHIMS0115013 Courtesy of INFN-LNF

#### List of Main Supplies

S-band Accelerating Stucture



### 2. S-BAND ACCELERATING STRUCTURE

#### MITSUBISHI HEAVY INDUSTRIES MACHINERY SYSTEMS

MHIMS0115013



Photo courtesy of INFN-LNF





Photo courtesy of INFN-LNF

Main Parameters	
Frequency	2856 MHz (45°C in vacuum)
Structure	Disk-loaded
Average Accelerating Field	< 25MV/m
Accelerating Type	Constant Gradient, Travelling Wave
Operation Mode	2π/3
Unloaded Q	13000
Input VSWR	< 1.05 (at Operation Frequency)
Attenuation Constant	0.57
Phase error	2.5 degree
Number of Cells	82 + 2 Coupler Cells
Filling Time	0.83 μs
Waveguide Flange	SLAC rectangular type
Beam Line Flange	Fast-demounting Type
	0



## MOVE THE WORLD FORW>RD