



S5Ch

Identification of the installation/facility :

Country: FRANCE
Location (city): Meudon
Name of the facility: S5Ch
Date of construction or of acquisition or of main refurbishment: 1951
Owner: ONERA
Contact point: chanetz@onera.fr
Internet site: www.onera.fr

Technical characteristics:

1 - Type of infrastructure

Wind tunnel	<input checked="" type="checkbox"/>
Propulsion bench	<input type="checkbox"/>
Structures facility	<input type="checkbox"/>
Material facility	<input type="checkbox"/>
Simulator (ex. Flight simulator, tower, ...)	<input type="checkbox"/>
Flight test bed (aircraft, embedded facilities, ...)	<input type="checkbox"/>
Supercomputers	<input type="checkbox"/>
Other	<input type="checkbox"/>

2 - Main technical characteristics

test-section size : 0.3 X 0.3 m²
stagnation pressure : 20 000 Pa p_0 <math>< 90\,000\text{ Pa}</math>

stagnation temperature : 290 K T_{i0} <math>< 310\text{ K}</math>

Mach number : 1.2 M <math>< 3.1</math> (with six different adjustable nozzles)

3 - Research domains which can be addressed (refer to ACARE taxonomy)

1. Flight Physics/Airflow control/flow control/P

4 - Main (or specific) associated measurement techniques

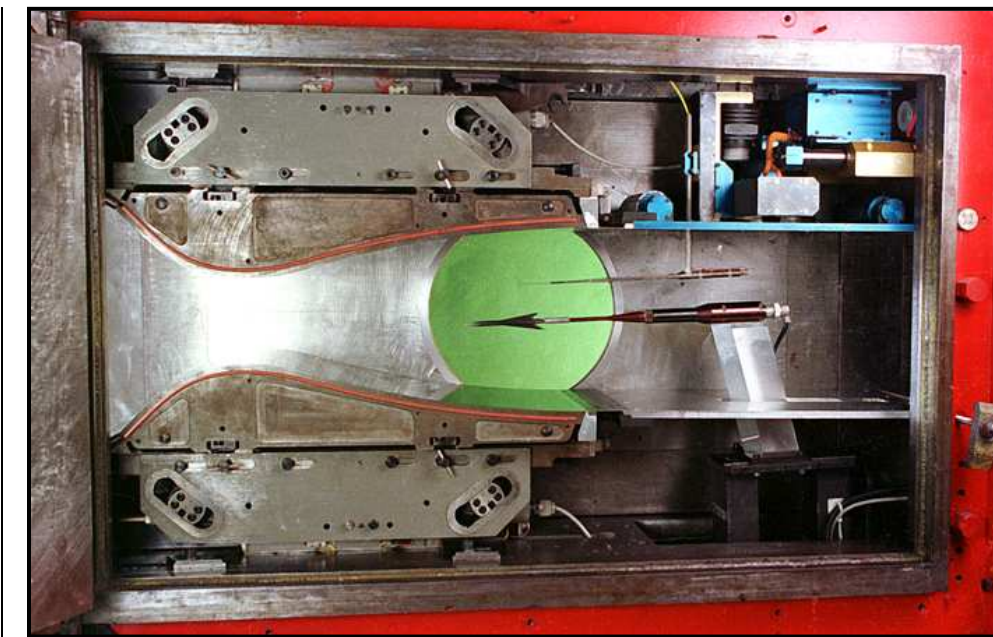
5-holes probes
Laser Doppler Velocimetry

5 - Operational status

- Fully operational



6 - picture



Financial elements:

Replacement cost (M€uros)

Less than 10

10 to 30

30 to 60

60 to 100

More than 100

Practices concerning:

Access policy : contract, eventually voucher)

Support : European, private, national

Origin of information ('signature'): author and date

B. Chanetz, 10 February 2011