

micro-hole test

- Motivation
 - MIMAC-like ion injection to TPC?
- Result
 - Yes.
- Manufacturing
 - Two companies found (Hikari-kikai, Orbray).
 - $\sim 1 \mu\text{m}$ diameter hole on $10 \mu\text{m}$ -thick SUS foil

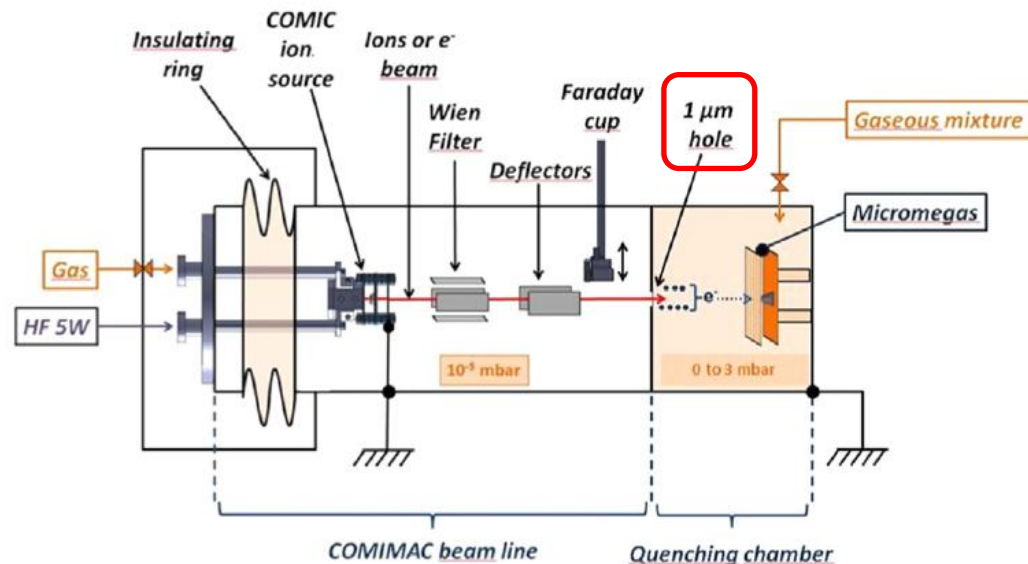


Fig. 2. Schematic of the COMIMAC beam line facility.

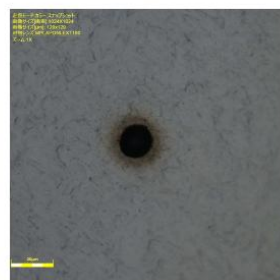
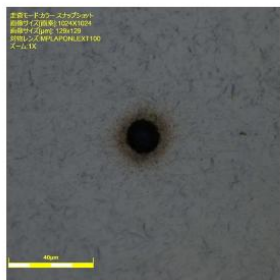
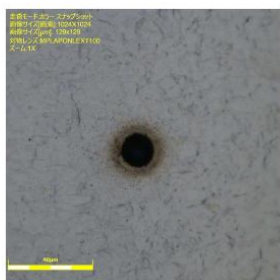
Hikari-kikai tapered hole

観察

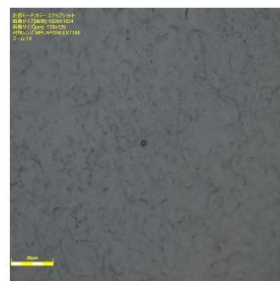
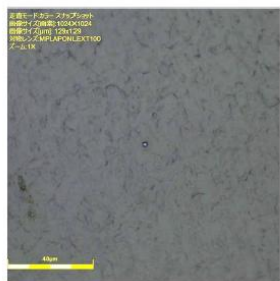
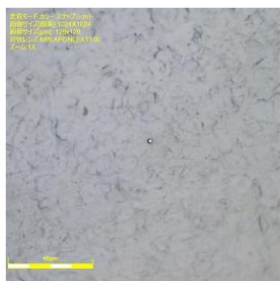
2

3

照射側
Φ約15 μm



反対側



Orbray more straight hole

2025/1/6
Orbray株式会社
作成:志村

No.1

Φ2.9

Φ1.2

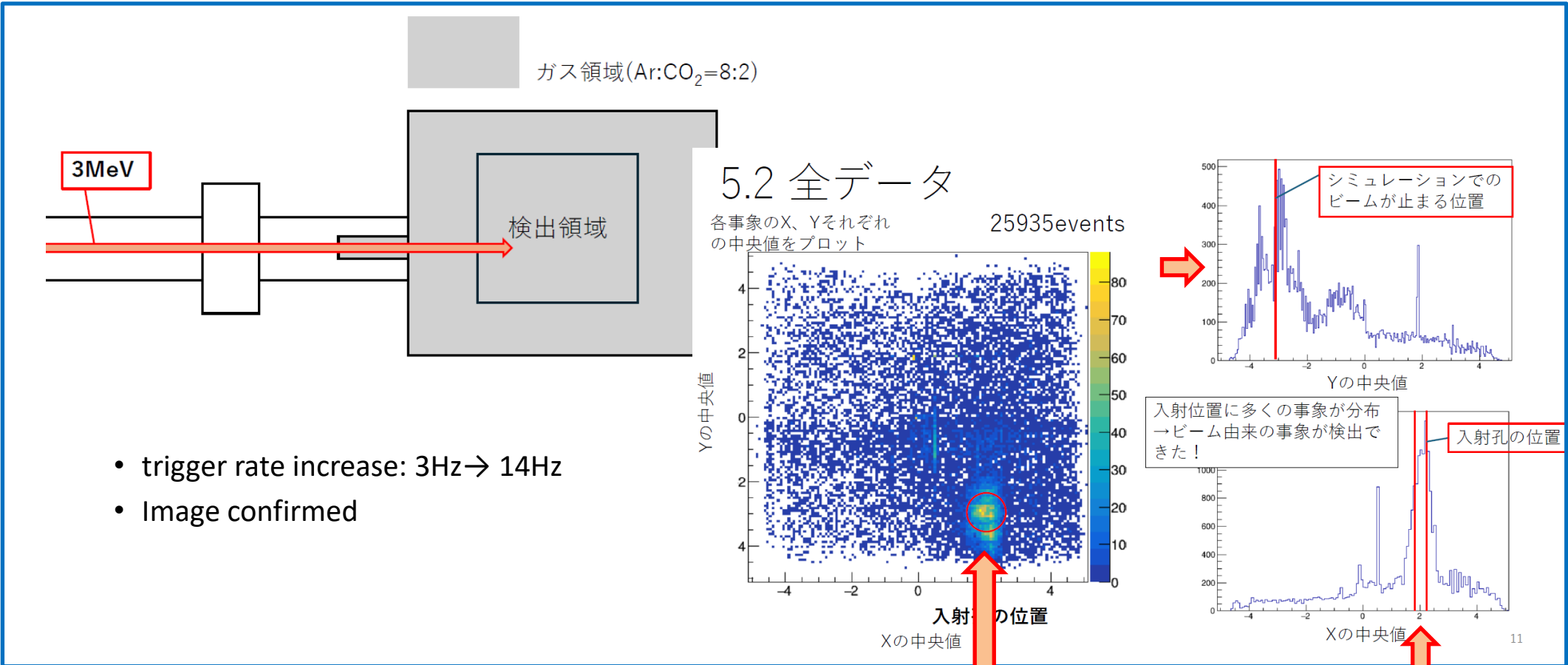
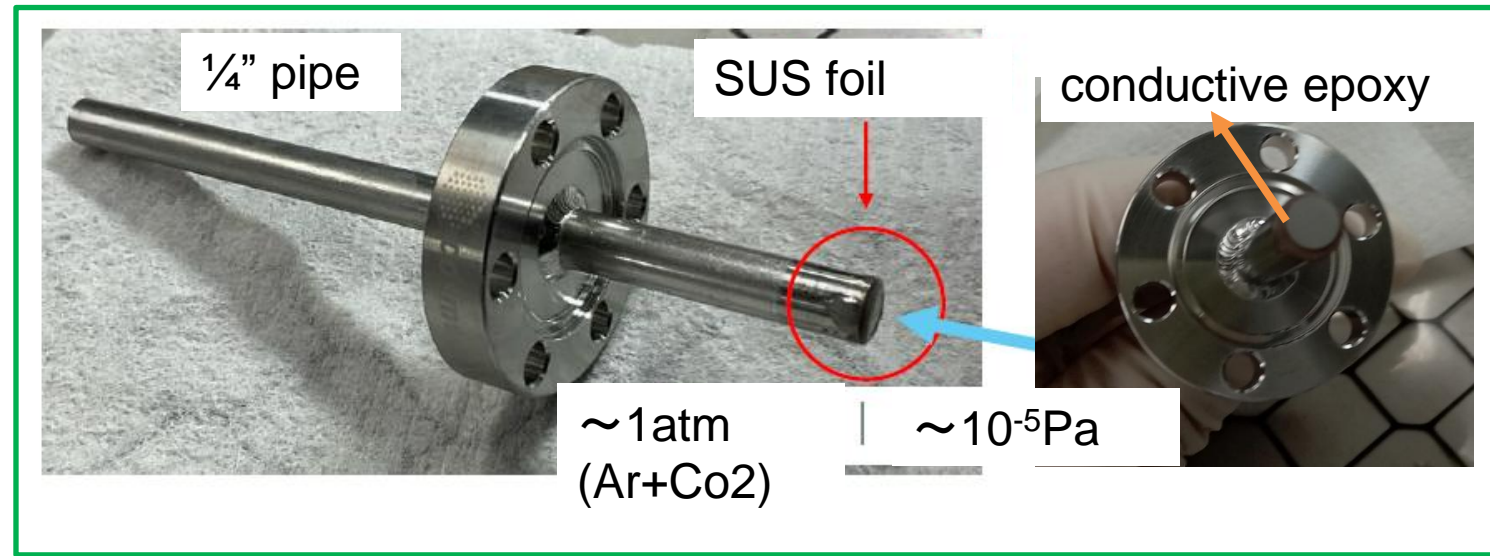
No.2

Φ2.7

Φ0.8

(μm)

- test (B4 members)
 - used Hikari-kikai's one
 - vacuum tightness : OK
 - 3MeV proton injection to TPC: OK



- trigger rate increase: 3Hz → 14Hz
- Image confirmed