THE MARVIKEN REACTOR

Checking the drilling of the 76 pipe connections in the bottom flanged end of the Marviken (Sweden) reactor pressure vessel. This vessel is the biggest of its kind to be manufactured in Sweden. It is made in two sections,



8 and 15 metres long respectively, of 76 mm molybdenum alloyed steel. lined with 5 mm stainless steel welded in ringe to the inner wall of the vessel. The two pieces will be held together by a new type of flange joint designed for the purpose by AB Atomenergie,

The vessel, including the moderator tank of stainless steel and the top of the reactor core top frame, will be delivered in mid-1966. The Marviken power station will employ a boiling heavy water reactor to provide 140 MW(e), with the possibility of increasing the power to 200 MW(e) by installing Internal nuclear superheat.

POWER REACTORS OF THE WORLD

The following table shows the power reactors - in operation and under construction - in June 1965.

| Name | Location | Туре | Net Output (MWe) | Criticality |
|--------------|-----------------------------|---|---------------------|---------------|
| (1) Belgium | | | | |
| BR-3 | Mol | Press. H ₂ O, 3.7 + 4.4 % U | 10.5 | Aug 1962 |
| (2) Canada | | | | |
| NPD | Rolphton | Press. D ₂ O, nat. U | 20 | Apr 1962 |
| (3) France | | | | |
| G-1 | Marcoule | Nat. U, graphite, air | 1.7 | Jan 1956 |
| G-2 (G-3) | Marcoule | Nat. U, graphite, CO ₂ | 2×35 | Jul 58/June 5 |
| EDF-1 | Chinon | Nat. U, graphite, CO ₂ | 68 | Sep 1962 |
| EDF-2 | Chinon | Nat. U, graphite, CO ₂ | 198.5 | Aug 1964 |
| (4) Germany, | Federal Republic of | | | |
| KAHL | Grosswelzheim/ Kahl/Main | Boiling H ₂ O, 2.6 % U | 15 | Nov 1960 |
| (5) Italy | | | | |
| LATINA | Latina | Nat. U, graphite, CO ₂ | 200 | Dec 1962 |