

**Note:** *Option #1* should be used for **Fleece 3xDF** and **Terry 1.5xTR** due to the significant difference in yarn feeding rate for different yarns.

**In Fleece set-up, use:-**

- lower aluminium ring for Tie-In and Ground (or Knit-In) yarns, and
- upper aluminium ring for Fleece (or Lay-In) yarns.

**In Terry set-up, use:-**

- lower aluminium ring for Ground yarns, and
- upper aluminium ring for Plush yarns.

The Q.A.P. by Memminger-IRO come in 2 types, i.e.:

Type (Quoted By Its Diameter)	Effective Working Diameter Range
Diameter Ø90mm - Ø175mm	Ø95mm - Ø170mm
Diameter Ø90mm - Ø250mm	Ø95mm - Ø245mm

**Table (3.2) Effective Q.A.P. Diameters**

The type with diameter Ø90mm - Ø250mm is usually required for fabrics with exceptionally high yarn feeding amount such as the terry/plush fabric with pile height 2.9mm and above.

Other than Memminger-IRO, other suppliers provide the following Q.A.P. types:

- Ø70 - Ø200mm
- Ø90 - Ø200mm

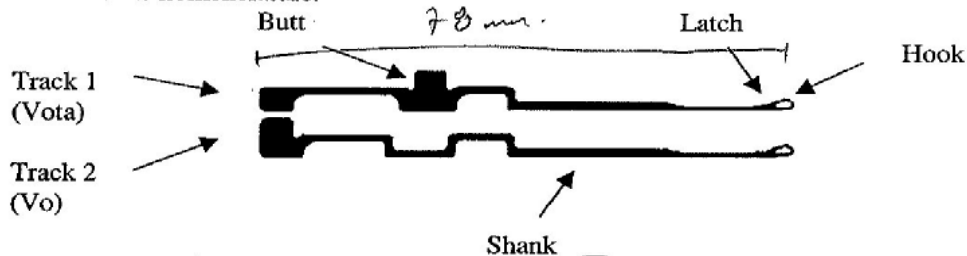
Note: "Ø" = symbol for diameter

## 3.2 Knitting Technology and Cams

### 3.2.1 Knitting Technology

#### 3.2.1.1 Knitting Needles

The needles used on Unitex machine are called latch needle. The following figure illustrates the nomenclature.



**Fig (3.1): Nomenclature of a Latch Needle (Vota 78 and Vo 78)**

↪ refers to a length