Bag full of wisdom when you are in trouble

No.125

【Question】

We received a request for an oversize HT (hand tap) M10×1.5 5P from a customer. What does “oversize tap” mean?

【Answer】

An **oversize tap** refers to a tap whose **pitch diameter is larger than the standard class**.In the case of YAMAWA, the standard class for **HT M10×1.5** is “P3.” Therefore, “P4” (20 µm larger) and “P5” (40 µm larger) listed in the product catalog **are oversize taps**.
Below, I will explain how to distinguish between the standard class and oversize taps in the general catalog.

【Explain】

HT M10×1.5 — What are the differences between the standard and oversize class?

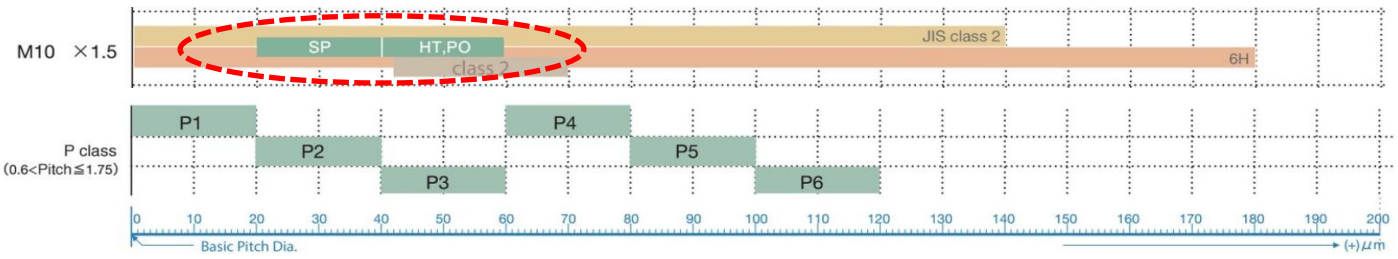
M10×1.5	P3	TNMR010O5	5P	75	23	-	38	7	5.5	8	4	6
M10×1.5	P3	TNMR010O1	1.5P	75	23	-	38	7	5.5	8	4	6
M10×1.5	P4	TNMS010O5	5P	75	23	-	38	7	5.5	8	4	6
M10×1.5	P4	TNMS010O1	1.5P	75	23	-	38	7	5.5	8	4	6
M10×1.5	P5	TNMT010O5	5P	75	23	-	38	7	5.5	8	4	6
M10×1.5	P5	TNMT010O1	1.5P	75	23	-	38	7	5.5	8	4	6

For HT, the standard class is **“P3”**, and the oversizes **“P4”** and **“P5”** are shown in yellow. The color coding makes it easier to see!

FROM YAMAWA CATALOG 2025-2026

【Advice】

The standard class is set according to the type of tap and its designation (size and pitch). For example, for M10×1.5, YAMAWA's standard class differs as shown in the figure below: SP is “P2,” while HT and PO are “P3.”



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The recommended oversize amount depends on why it is needed.
For example, if a thread tapped with a standard class “P3” tap passes the go-gauge but is slightly tight, we suggest using a class “P4” which is one class larger. Oversize taps are also required for plated threads, where the class must match the plating thickness. For details, see the “Bag Full of Wisdom” series: Tap Class and Plating Thickness (No.053), Oversize Amount for Plating (No.052), and Hot-Dip Plating and Tap Class (No.025).