

## 命令模式

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PROPULSOR [(n)] diameter, l, t, v [/POWER: p] [/BP: pull] [/S: sf] [/H: ht]  
[/THRUST: t0[,t1[,t2[,t3]]]] [/TD: tdf] [/WF: wf] [/ACCESS]

Defines or accesses information for a propulsor.

定义或访问推进器的信息。

PROPULSOR [(n)] OFF

Deletes a propulsor, or all propulsors if no number is given.

删除一个推进器，如果未给出编号，则删除所有推进器。

PROPULSOR [REPORT] [/BRIEF]

Displays all propulsors (to the screen only if REPORT is absent).

显示所有推进器（仅当没有报告时才显示屏幕）。

## 参数说明

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(n)

The number assigned to the propulsor, in the range  $1 \leq n \leq 9$ .

分配给推进器的数量，范围为  $1 \leq n \leq 9$ 。

diameter

Longitudinal, transverse, and vertical propulsor coordinates. MIN or MAX can be used in place of t to specify the minimum (portmost) or maximum (starboardmost) values at the given l and v on the surface of the vessel. Likewise MIN or MAX can be used in place of v for the lowest or highest displacer points at given l and t. PMIN and PMAX act like MIN and MAX but only consider components with positive effectiveness.

纵向、横向和垂直推进器坐标。MIN 或 MAX 可用于代替 t，以指定船舶表面给定 l 和 v 处的最小（最左舷）或最大值（右舷最远）值。同样，在给定的 l 和 t 处，可以使用 MIN 或 MAX 代替 v 表示最低或最高位移点。PMIN 和 PMAX 的作用类似于最小和 MAX，但只考虑具有积极有效性的组件。

/POWER: p

Specifies the propulsor power in horsepower (hp) for English units or kilowatts (kW) for metric units.

指定英制单位的推进器功率（以马力（hp）为单位）或公制单位的千瓦（kW）。

/BP: hp

Specifies the bollard pull of the propulsor in current weight units.

以当前重量单位指定推进器的系柱拉力。

/S: sf

Specifies the fraction of the projected propulsor circle area that would be intercepted by the rudder turned 45 degrees from centerline.

指定从中心线旋转 45 度的方向舵将截获的投影推进器圆圈区域的比例。

/H: ht

Specifies the vertical distance from the propulsor shaft centerline at the rudder to the towing bitt, in current length units.

指定从方向舵处的推进器轴中心线到牵引钻头的垂直距离，以当前长度单位表示。

/THRUST: t0[,t1],[t2],[t3]]

Specifies curve coefficients to compute thrust from a 3rd order polynomial function of advance ratio  $J$ , scaled with respect to other propulsor characteristics. All coefficients default to zero.

指定曲线系数，以根据前进比  $J$  的 3 阶多项式函数计算推力，相对于其他推进器特性进行缩放。所有系数默认为零。

/TD: tdf

Specifies the propulsor's thrust deduction factor, which must be positive; the default is 0.1.

指定推进器的推力减额系数，该系数必须为正数；默认值为 0.1。

/WF: wf

Specifies the propulsor's wake fraction, in the range  $-1 \leq wf \leq 1$ ; the default is 0.1.

指定推进器的伴流分数，范围为  $-1 \leq wf \leq 1$ ；默认值为 0.1。

/ACCESS

Accesses a propulsor's data into variables without making changes. When present, all other parameters except (n) are variable names used to access the corresponding information; asterisks can placeholder for any unneeded names.

将推进器的数据访问到变量中而不进行更改。如果存在，除 (n) 之外的所有其他参数都是用于访问相应信息的变量名；星号可以放置任何不需要的名称。

/BRIEF

Reduces display information to a single line per propulsor.

将显示信息减少到每个推进器的一条线。

## Operation

### 操作

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A propulsor is defined by specifying its diameter, location, and associated characteristics. The  $n$ th propulsor is defined (or redefined), but if (n) is missing, then the first available unassigned propulsor number is used.

推进器是通过指定其直径、位置和相关干扰来定义的。定义（或重新定义）第  $n$  个推进器，但如果缺少 (n)，则使用第一个可用的未分配推进器编号。

## Display Output

### 输出显示

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PROPULSOR REPORT produces a table listing information for all propulsors.

推进器报告生成一个表格，列出所有推进器的信息。

### Nondisplay Output:

#### 无输出显示:

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none

无

### Examples

#### 样例

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Defining a single propulsor with a quadratic thrust curve and specific wake and thrust deduction fractions to prepare an IMO SGIS Surf-riding/Broaching stability analysis:

定义具有二次推力曲线和特定伴流和推力减额分数的单个推进器，以准备 IMO SGIS 导边/随边稳定性分析。

```
PROP (1) 2.3,75a,0,1.2 /THRUST:0.2244,-0.2283,-0.1373 /WF:0.156 /TD:0.142
```

Accessing propulsor information into variables:

将推进器信息访问到变量中:

```
VARIABLE D, L, T, V, T0, T1, T2, WF, TD
```

```
PROP (1) D, L, T, V /THRUST:T0,T1,T2 /WF:WF /TD:TD /ACCESS
```

Reporting all propulsors:

显示所有推进器

```
PROP REPORT
```

Displaying brief information on all propulsors to the screen:

在屏幕上显示所有推进器的简要信息.

```
PROP /BRIEF
```

Deleting all propulsors:

删除所有推进器.

```
PROP OFF
```