



Ferro Tec

HERMETIC VALVES
ELECTRO-PNEUMATIC
VACUUM ELECTRO-PNEUMATIC
CONTROL
PNEUMATIC ACTUATORS

40cG5GGŠTGQ=
2010° 3¥ 2D#Aq

2009° 11v25 ¥

BFGGGGG890H

<http://www.ferrotec.co.jp/>

5G66F4E4y

20091115

20091115

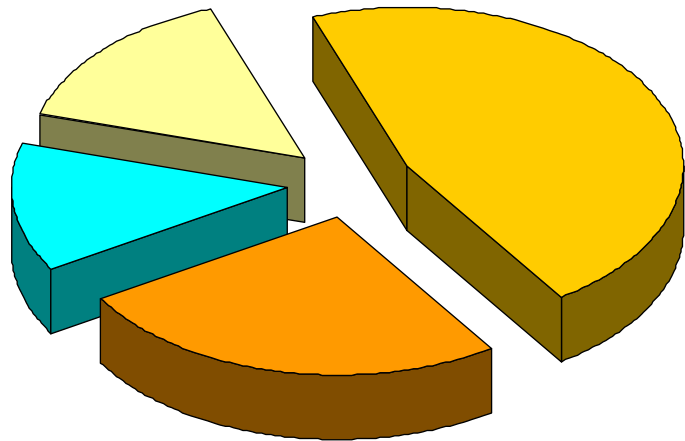
G"4) FçFöFÚG G FéF¹

H H •2(q01031115

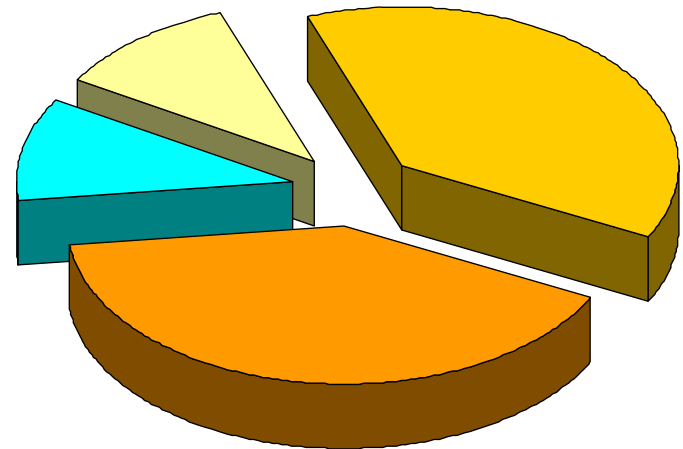
20091125

8 BFâG FöFÚG G FéF¹ •2(qFû°3UFâG Fi -0bG £ %4FyF,2(q 8 B ì!Fp \&kFp 8 •F÷FÒG F, £ ÌFúFçFû š fFâG G Fâ

>P>Ü>Ü>â>ô>D ‡ ‡
Ž V9»Ý>â>á h Ç



">P D ‡
Ž V9»Ý>ß>à h Ç



1 GEP

LED

H ,0d ! FøFçFö FØG H

GMOCVD

GF

LED

GF

CMSF

FPD

2 PV

GF

GF

GF

3 PVF

GF

4 GF

GF

GF

FCA

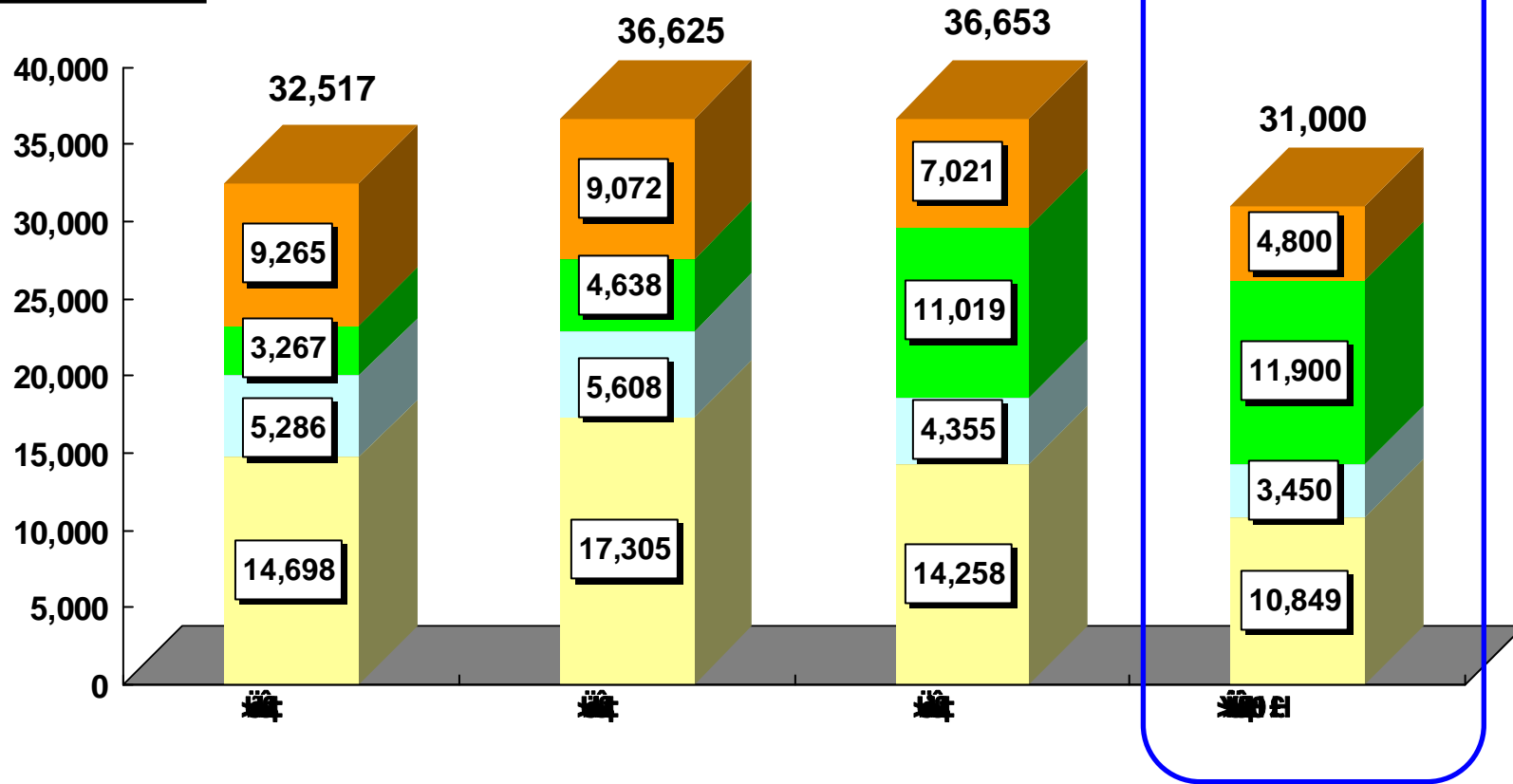
5 GF

GF

GF

GF

° Ø Ž v9x

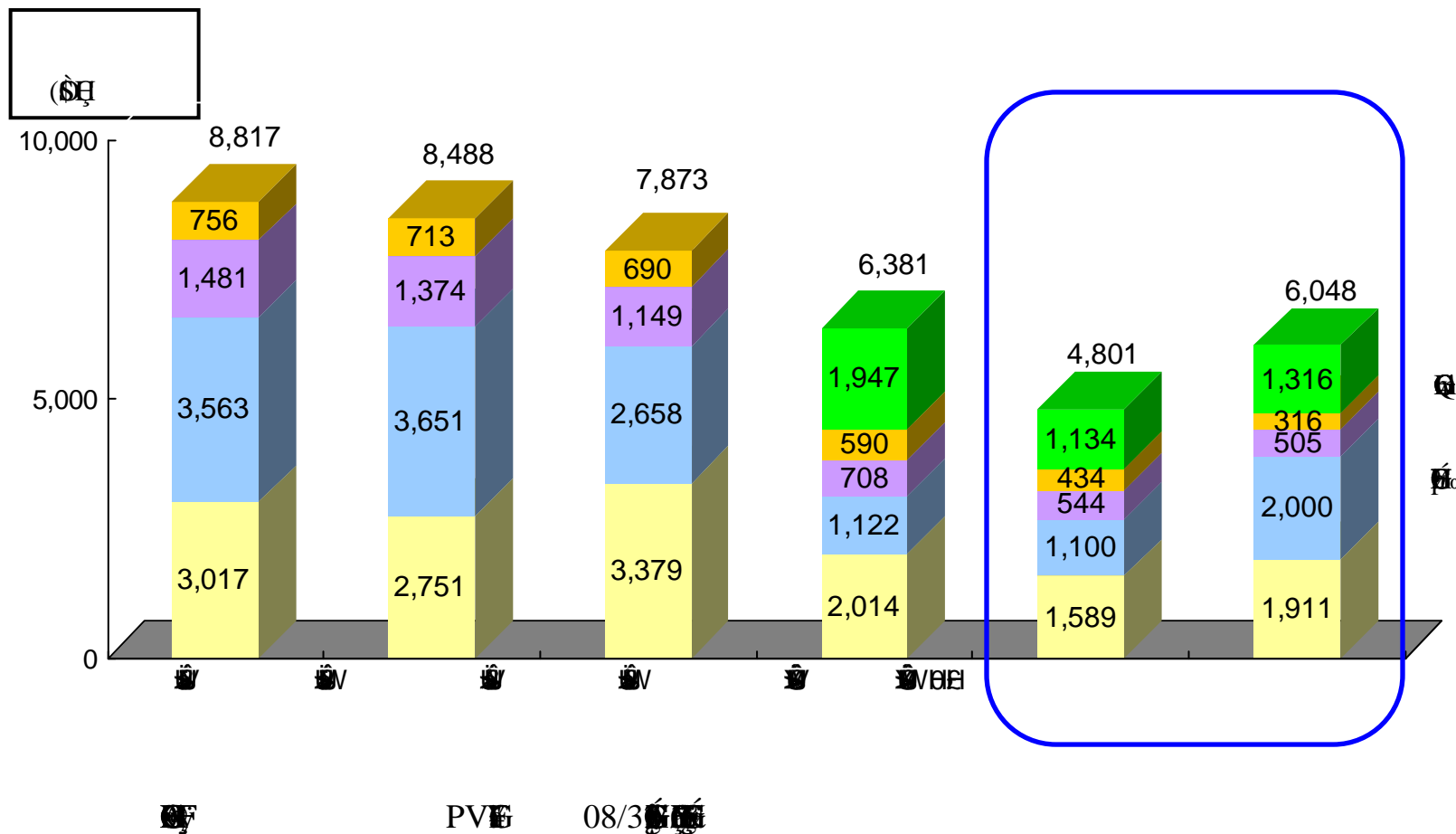


S B š

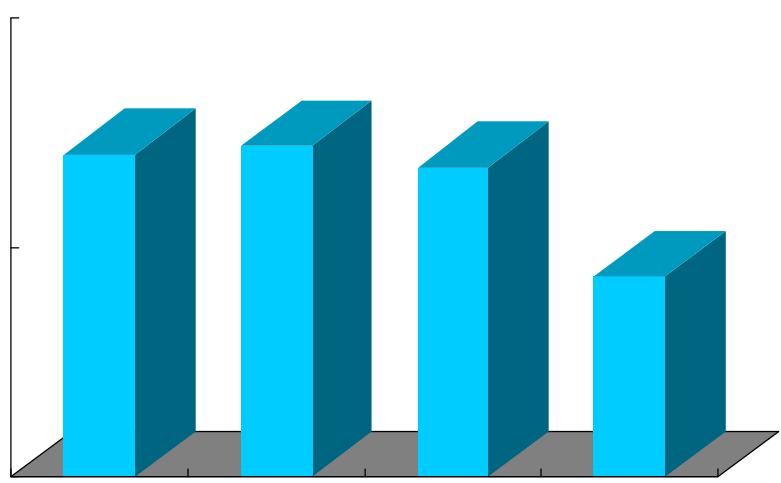


7g7Á à
>ß>ä>Ú>à>Ñ

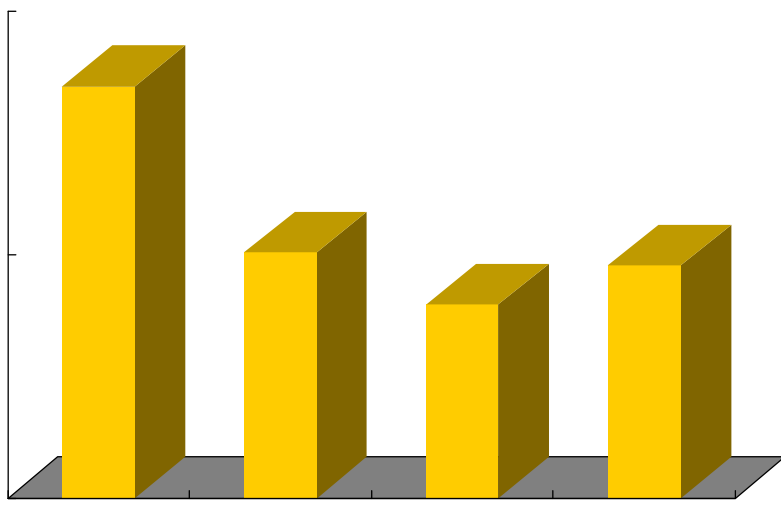




(6H)



(6H)



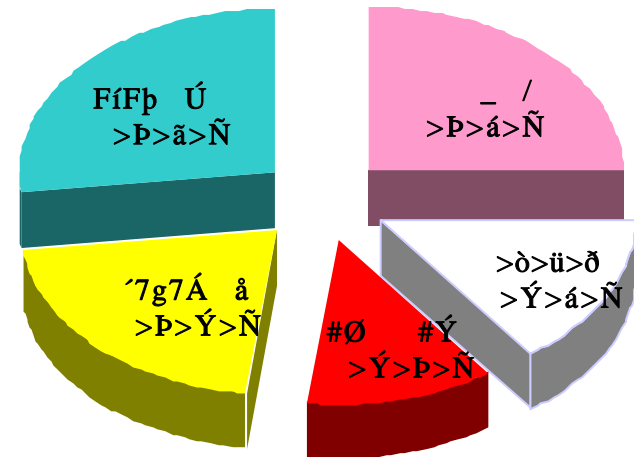
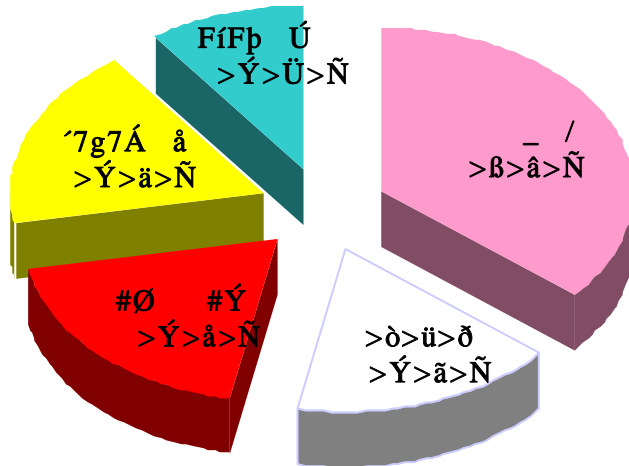
$\hat{H} > \acute{Y} > \ddot{U} > \hat{U} > \beta \ddagger V \ddagger Fp \)\frac{1}{4}$
 $G\% _ /0j \ \acute{z}2(Fp \ p) \ F\hat{u}G \ G \ F, \ \forall G\%(\bullet G\%$
 $\ddot{o} \ pG'' \ 5 \ dF\acute{u}F\beta F\acute{a}G \ G \ F^1$
 $G\% \ \backslash \ \acute{A} \ w \ Fp \ G \ \acute{Y}F\ddot{U}4 \ G \ F, \ \acute{Z} \ 4F, \ 8Q \ \backslash F,$
 $G\%(\bullet \ \backslash \ w \ F\ddot{y} \ \acute{I} \ tF\ddot{n}F\check{c}F,) \ \ddagger G \ F\hat{U}F\acute{u} \ G \ \acute{Y}F\emptyset F\acute{u}G$
 $> \emptyset > \ddot{n} > \check{d}F\ddot{U} \ 1 * F\acute{a}G'' \ -F\hat{o}$

$> P \gg \acute{Y} > \ddot{U} > \hat{U} > \beta \ddagger W \ \ddagger Fp \ 0b3\hat{u}F\check{c}$
 $G\% _ /G0GFG0 \ w \ F, (\bullet \ \backslash \ w \ F\ddot{U} \ \delta 1 * F\hat{u}3$
 $G\% \ \backslash \ \acute{A} \ w \ G \ G \ \acute{Y} \ \ddot{o} 1 * F\emptyset F\acute{u}G \ \acute{I} \ \acute{o}G$
 $G\% > \emptyset > \ddot{n} > \check{d} \ w \ F\ddot{U} \ q \ \#F, > \delta > \ddot{u} > \check{d}G \ 1 * F\hat{u} \ N\&$
 $G\% > \ddot{u} ? \ \# \acute{Y} - \check{c} + w / \acute{a} * (\ \forall F\acute{a}F\ddot{U} \ \acute{Y} \ q$
 $G\% 8Q \ \backslash \ B + w / \acute{a} * (GoG\check{S}G9G\check{S}Fp'gF\ddot{n} \ \forall F\hat{a}F\ddot{U} \ \frac{1}{2} \ /$

$F\hat{A} \ P' \check{C}F\acute{A}$
 $G\% 8Q \ \backslash F \div \# \acute{O} \# \emptyset \ \acute{D} ! Fp \ I \ \grave{i}G'' \ N4 \ F, \ \bullet / j \ - \ |6\acute{a}$
 $G\% GCGdG\% G0GIG \bullet GdGx \ Fp \ G'' \ M \ \text{TM} \ I$
 $G\% \ w \ GEG6G0Fp'' \acute{O} \ "F, \ * \ 2AFp \ \acute{o}'' @F\hat{u} \ P$
 $G\% \$ \ ' \ w \ Fp \ I \ \grave{i}$

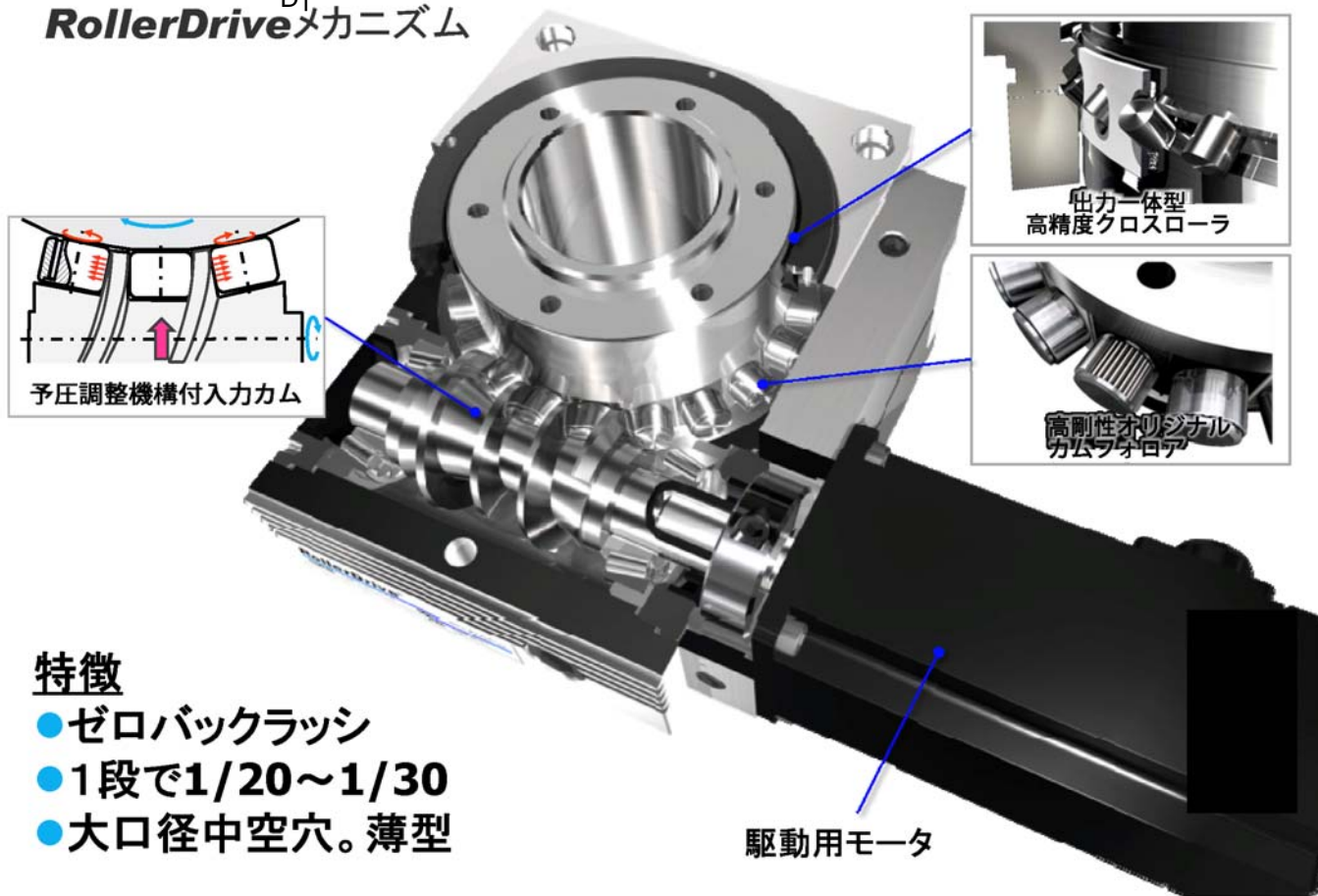
>P>Ü>Ü>â>Û>D ‡ ‡
 Ž V9»B>B>Ú>ã h Ç

">P D ‡
 Ž V9»Ý>á>Ú>ä h Ç



H ö3ÿ μ ÜFerroDrive6 ° Øh₆ †

RollerDrive^{Dt}メカニズム

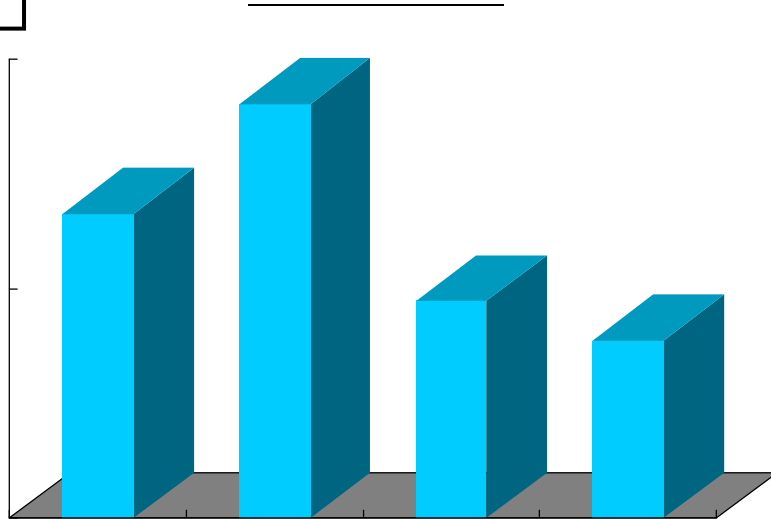


特徴

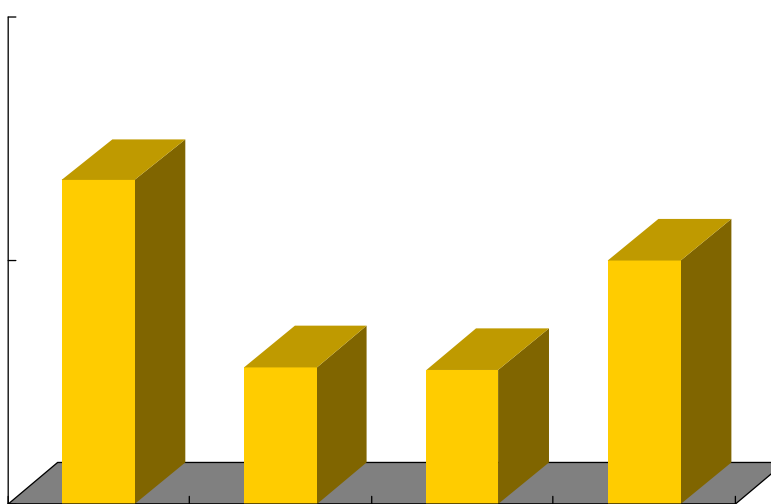
- ゼロバックラッシュ
- 1段で1/20~1/30
- 大口径中空穴。薄型

駆動用モータ

(6H)



(6H)

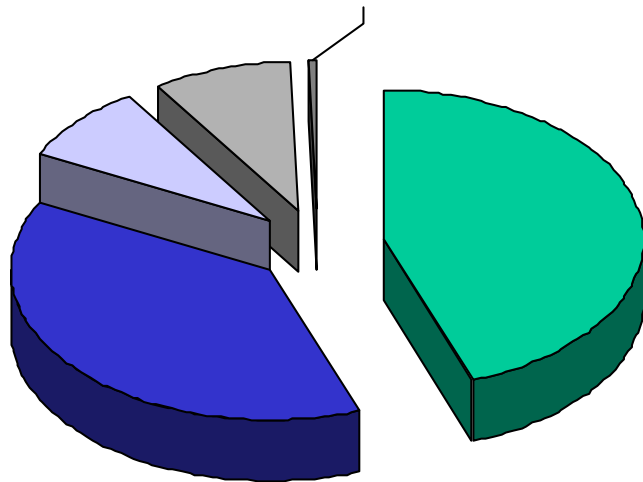


$\text{H} > \text{Y} > \text{Ü} > \text{Û} > \beta \ddagger \text{V} \ddagger \text{Fp}) \frac{1}{4}$
 $G\% GUG^G2GGGoG\check{S}G9G\check{S}Fp/\text{æ}*(' > " \acute{a} * \text{WFp} :$
 $G\% \backslash \text{Æ} \pm m > \hat{u} > \hat{n} > \hat{u} \text{ ¥FáFp} \pm \text{æFú} , ' \ddot{o} \text{aF}$
 $G\% (\bullet \backslash \pm m > \hat{u} > \hat{n} > \hat{u} \text{ ¥FáG } 3 > 1 * \text{Fû}) \text{G G}$
 $G\% \text{ ¥ } \bullet G\% \text{ p } \backslash \text{F} \div \text{Fp} \# \tilde{\text{O}} \# \emptyset 1 * \text{ZG}'' \langle \text{FçF}, [$

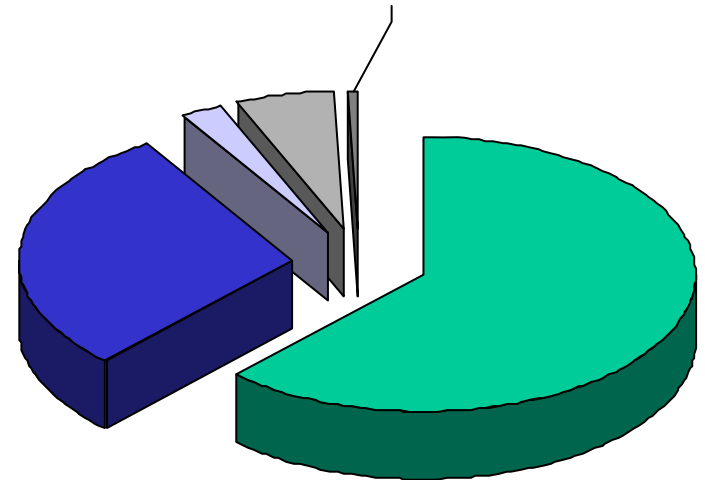
$> \text{P} \gg \text{Û} > \text{Ü} > \text{Û} > \beta \ddagger \text{W} \ddagger \text{Fp} 0 \text{b} 3 \hat{u} \text{Fç}$
 $G\% \check{Z} 4 \text{w} \text{FÜ} \text{q} \# \text{G}'' \hat{\text{E}} \text{FçF}, \check{Z} \text{V} \delta 1 * \text{G}'') \text{E} \text{I}$
 $G\% \backslash \text{ÆGtG}\check{S} \text{GDG}\check{S} \text{FÛG} \text{Fp} \text{w} @ \text{FÜ} \text{Q} \bullet 4 \text{ ¥}$
 $G\% (\bullet \backslash \pm m > \hat{u} > \hat{n} > \hat{u} \text{FÛG} \text{w} @ \text{G} \ddot{Y}$
 $G\% > \emptyset > \hat{n} > \check{d} / \text{æ} * (\text{ ¥FáF} \div \text{w} @ \text{FÜ} \acute{ı} \text{Q} \text{p}$
 $G\% \text{W} \ddagger \hat{i} \text{Ð} \text{iF} \div \quad \ddagger \% \text{FÜ} 5 \bullet 0 \text{b} 3, \text{G}$

$\text{FÀ} \text{P}' \text{ÇFÁ}$
 $G\% > \ddot{u} ? \# \text{Ý} 3 \check{d} 0 \quad \text{Fp} \text{f} \text{L}) \text{E} \text{F}$
 $G\% * \text{o} \text{AG} > \text{GzG}\check{S} \text{GW} \text{F} \emptyset 9 \times 2 \text{A} 0 \quad \text{G}''$
 $G\% > \emptyset > \hat{n} > \check{d} \text{w} \quad \text{ ¥FáG}'' \text{I} \text{iFçF}, 9 \times \text{GEG} 6 \text{G} 0 \text{G}'') \text{T}$
 $G\% GUG1G^G2GGGoG\check{S}G9G\check{S} \text{ ¥FáF}, \text{G} 0 \text{GFG} 0 \text{w}$

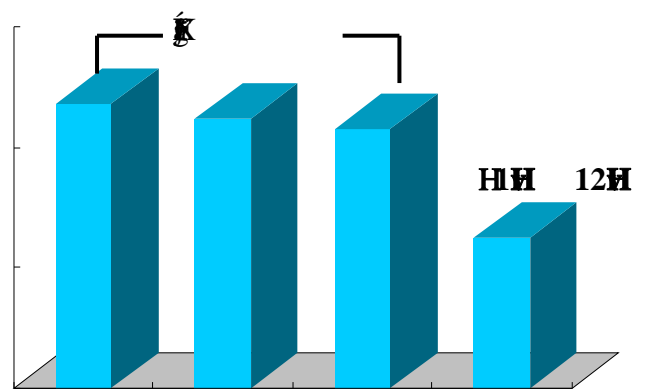
>P>Ü>Ü>â>Ů>D ‡ ‡
 Ž V9»P>â>Ú>á h Ç



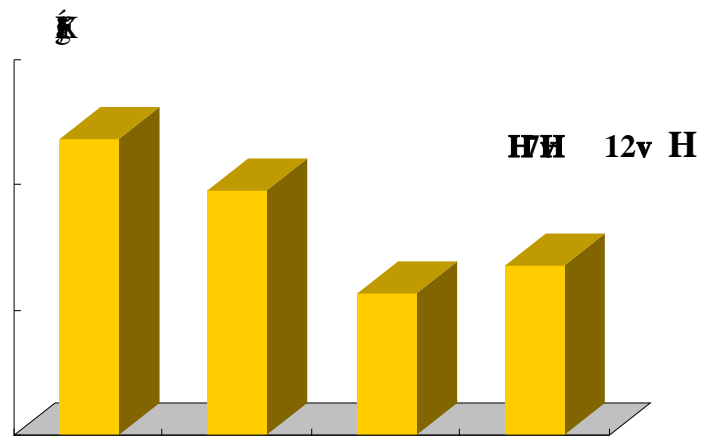
"»P D ‡
 Ž V9»Ý>Ý>Ú>Ü h Ç



(6H)



(6H)



H H H >UHV H H H H vH Fp)¼

GIGEGXGdGy GIGwGmGQG=GG GŠGyAÿ

G%GoGpGxGŠH >ú>Û>ò? ? ? ? >Õ#ÝFÿF,5 \$×FûFÿ
°FóFiFÛ o A%Ú oFÛ ô íFû4 G#Fð

G%G{GFGQG=#ÝFÿF, ¼ <3âFûG G s8jG" 5G
Q •FçFi

GcG/G2GGIGwGmGQG=GG

G%o _ /GoGŠG9GŠFp ± œ ö#ØFø ,0d ž2(Fp >3æ
"IFûH >ÛH v Ž VG%o w @FÿFÛFôFöFúFÔ * È=

H H H H >UHV H H H H vH Fp0b3ûFç

GIGEGXGdGy GIGwGmGQG=GG GŠGyAÿ

G%o>ú>Û>ò? ? ? ? #ÝFÿF,#Ý3ðFp 1 Ñ ±F÷ w
G%G{GFGQG=#ÝFÿF, 7ÁFÛG 343U#Ý3ðG F÷F, 1

7Â0[Fp Ñ ± ö1*FÛ â)FFéG

GcG/G2GGIGwGmGQG=GG

G%o Ž 4 ¥Fá _ /GoGŠG9GŠFp ,0d ž2(FûG G
G Ý •8 G F,H >ýG G 8Q \ ¥FáG M4Š G Ý

G%o3z FÿF,(G%oGEG•G:GkGŠGy ¥FáF÷%T Fû2 2°C

H H)E)F2 Ž %o5*

G%o? ? ? ? ? G2° è ì ½Fp#Ý3ð Ñ ±

G%o(• \G%oG0GFG0 w Fp ,0d7Â0[G%o ,#Ý3ð6ä

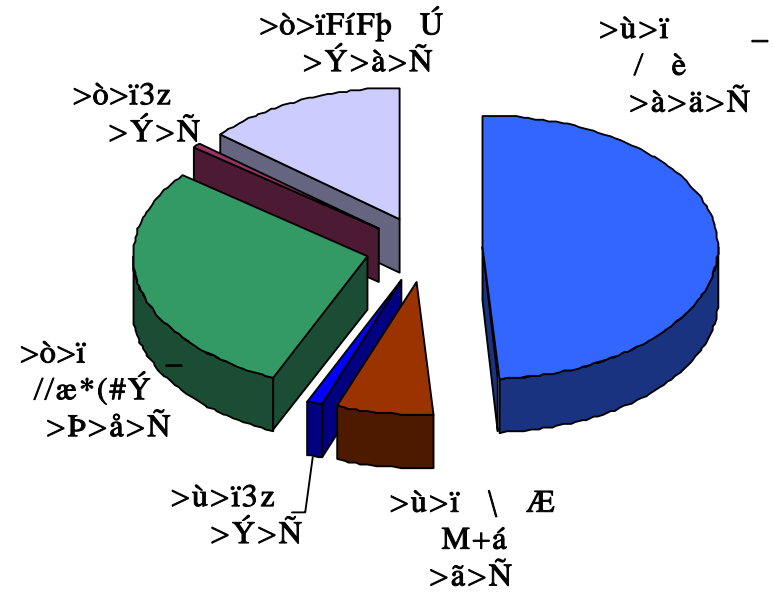
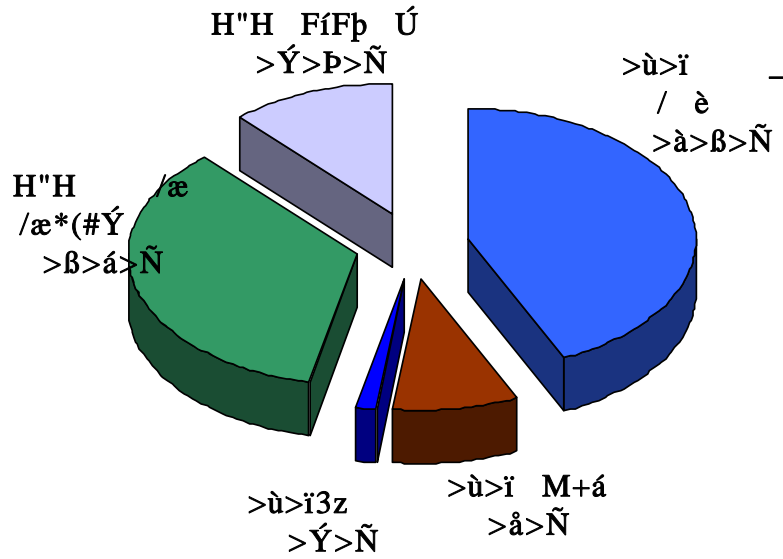
G%o , | q6ä\$ÛFûG G 2 Ž† x ŠFp I ì

>P>Ü>Ü>â>Ů>D ‡ ‡

Ž V9»P>ß>Ú>â h Ç

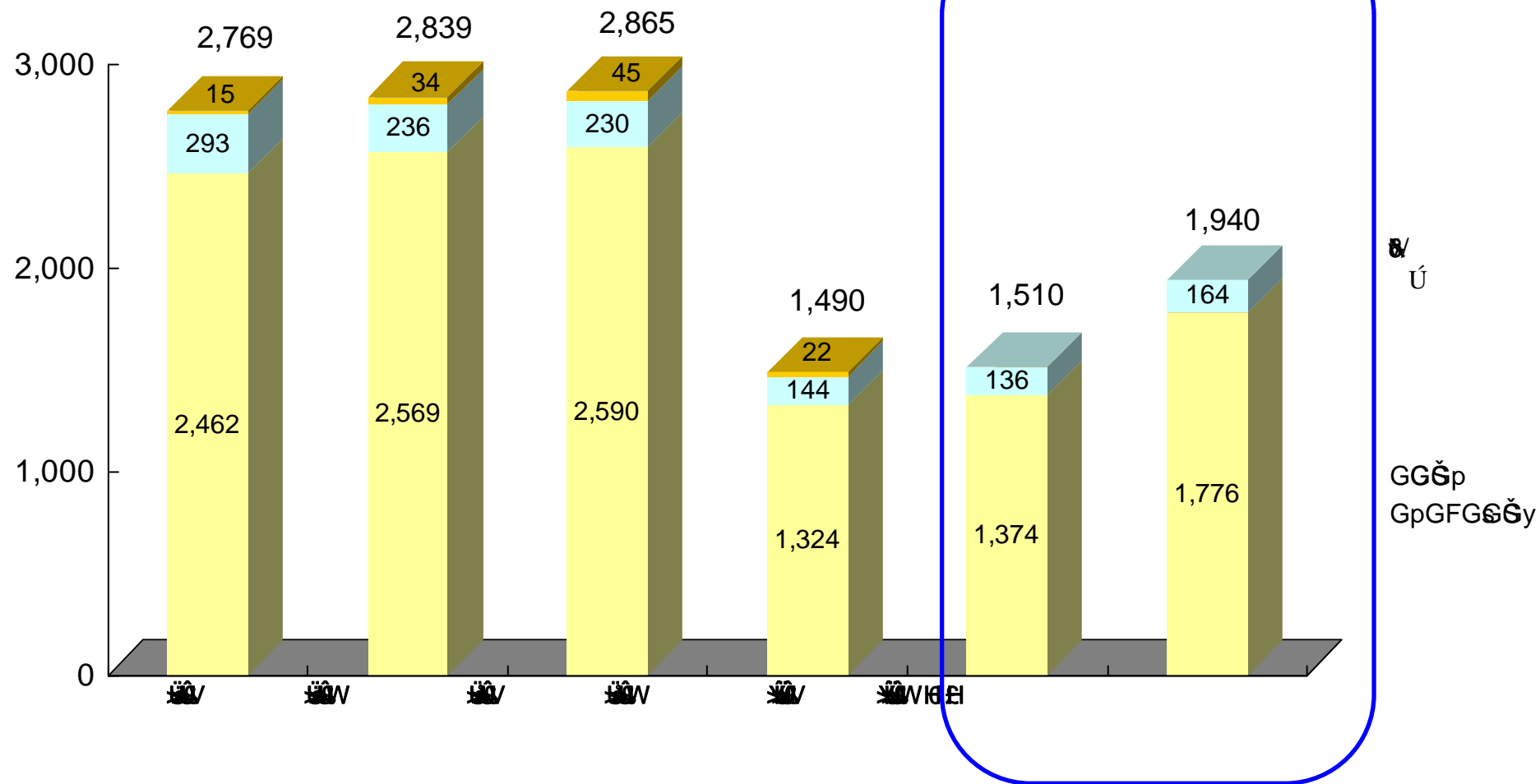
>P>Ü>Ý>Ü>Ů>D ‡ ‡

Ž V9»Ý>Ý>Ú>ß h Ç

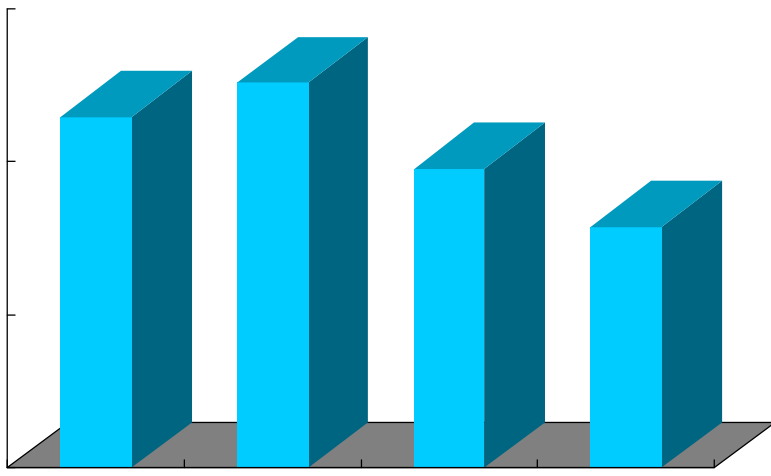


H)H H GIGEGXGdGyG%GIGwGmGQG=GGH GiGVGgGŠGyH

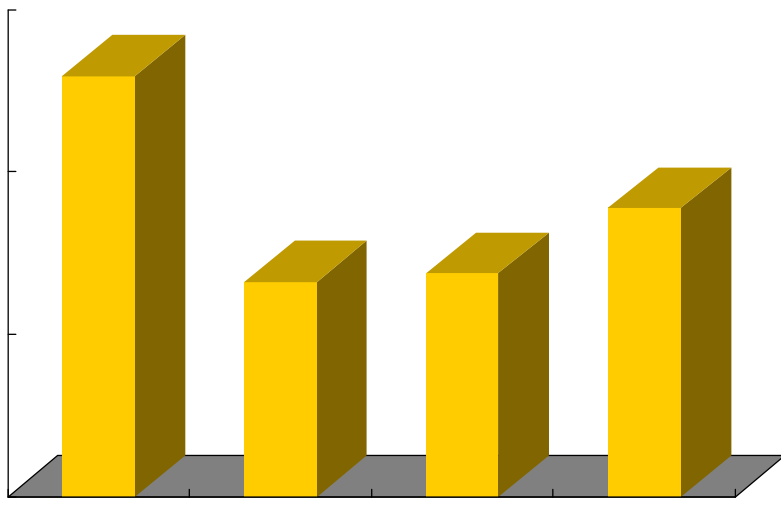
Ž V9x
(S)



(64)



(64)



Ů >Ý>Ü>Ů>ß ‡ V ‡Fp)¼

+↵ .34 1*GEGŠGV

G%o a#úFp+↵ .34#Ø Ì)...Fp s8jFûG G Ž V

> \ ; ÓFp - |ÇFûG G #Ō#ØFÜ Ì6äFâG Ĩ

FíFp ÚFp#Ø

G%o#Ø 9F÷FÿF, _ / ¥FáFÜ ö aFçF, ,#Ō#

#ÝFÜ ò1*

G%o \ Æ w FÿF, *3PFçFiFÜG^G2G8 µ p#ÝFÿ

,#Ō#ÝFÿ B6×Fç G Ý ö1*FøFúG

>P>Ů>Ü>Ů>ß ‡ W ‡Fp0b3ûFç

+↵ .34 1*GEGŠGV

G%o £ • è VFû G Ý ì ‡Fÿ ©FÔFÜF,)†G FÛF

G%o \#Ø34F,8Q \34FÜ ú7 G"0bFëG

FíFp ÚFp#Ø

G%o \$ª è /æ*(#ÝF,G^G2G8 µ p#ÝFÜ G

G%o ,#Ō#ÝFÿ G#Ý0 Ñ ±F÷ ò1*)T â

FÀ P'ÇFÁ

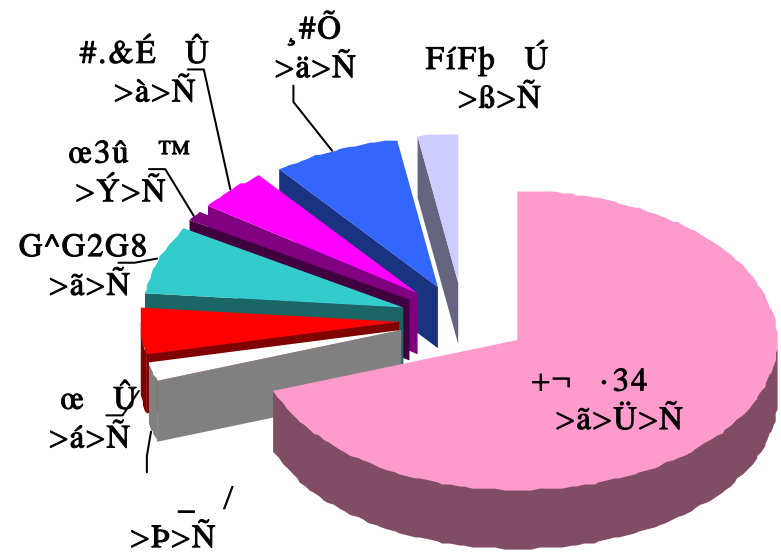
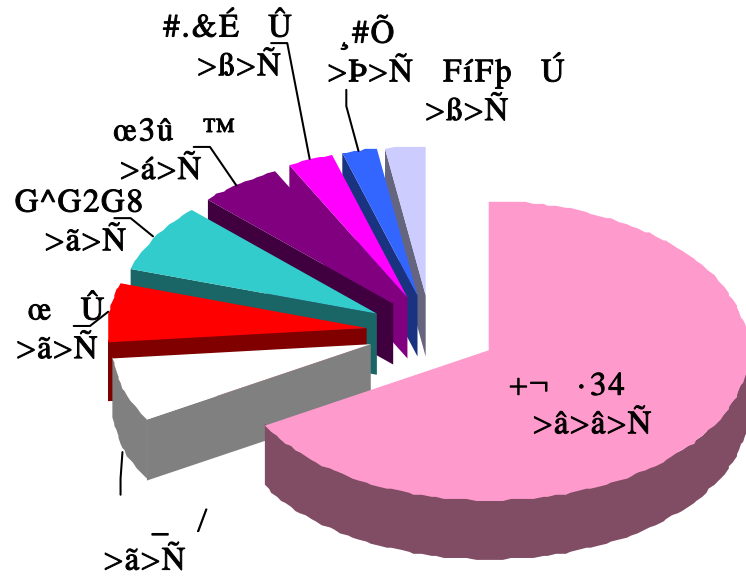
G%o Â#Ý0 Fp Ñ2

G%o œ3û ™ w G Fp • A g °

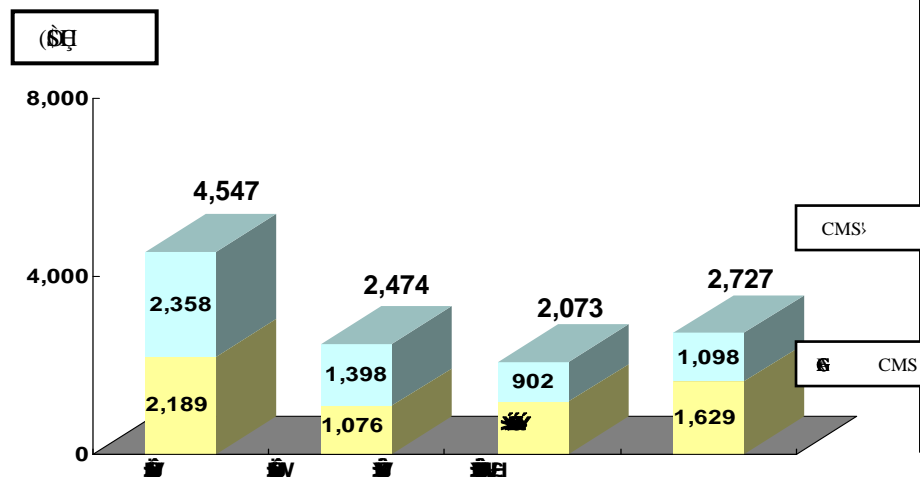
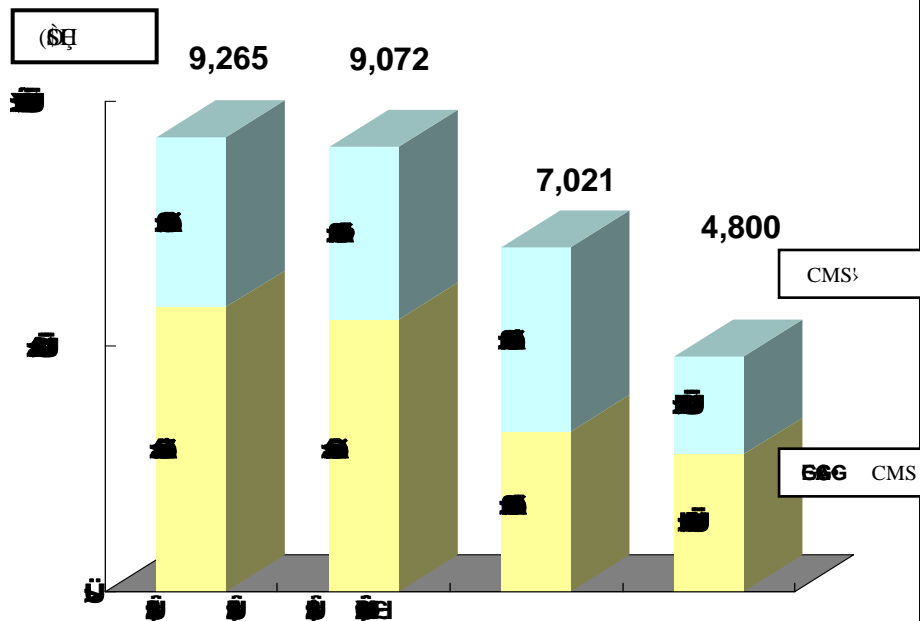
G%o ,#Ý3õG0GeGxG?GŠGEGuG•G Fp î S

>P>Ü>Ü>â>Û>D ‡ ‡
 Ž V9»P>á>Ú>ã h Ç

”>P D ‡
 Ž V9»Ý>B>Ú>ã h Ç



Ž9F#



H >Ů>Ü>Ů>ß ‡ V ‡Fp)¼
 GEGxGAG•>i>ù>yH G4G6GŠG] • dH
 G%GUG1GGG=GxGŠGVG4G6GŠG]7Â)% O ìF÷ ö

/æ*(4Š Y w
 G%>ò>ü>đ/æ*(Fp' ·FÜ 1*F÷0£#i)zF÷ N&ã

d 8 μ ”0 4 G%FíFp Ú
 G% ±FÝFú š ·Fy!“FÔFÜ w #” C O ìF÷ *3F

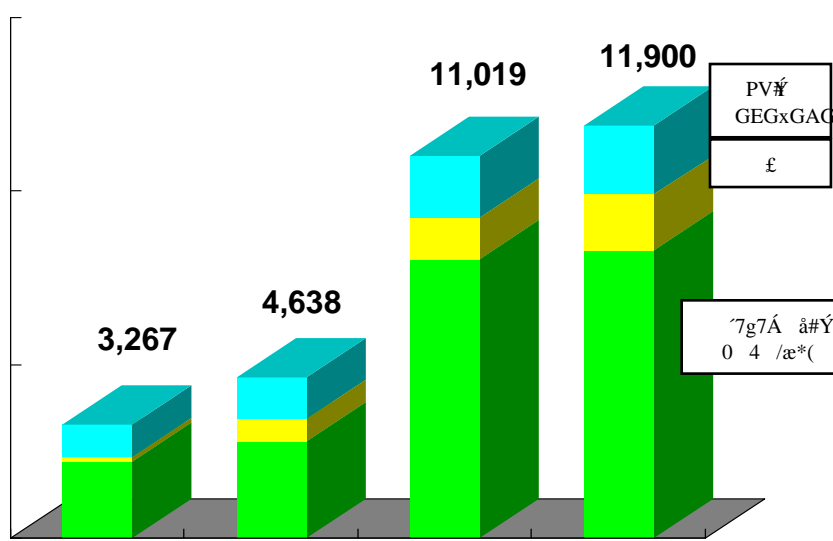
H >Ů>Ü>Ů>ß ‡ W ‡Fp0b3ûFç
 GEGxGAG•>i>ù>yH G4G6GŠG] • dH
 G% w #” CFp G ÝF÷ ŽF»Fû Q •Fp0b3ûFç

/æ*(4Š Y w
 G% p \GcG/G4G•GWGxGŠFp Ú d FÜG , œ

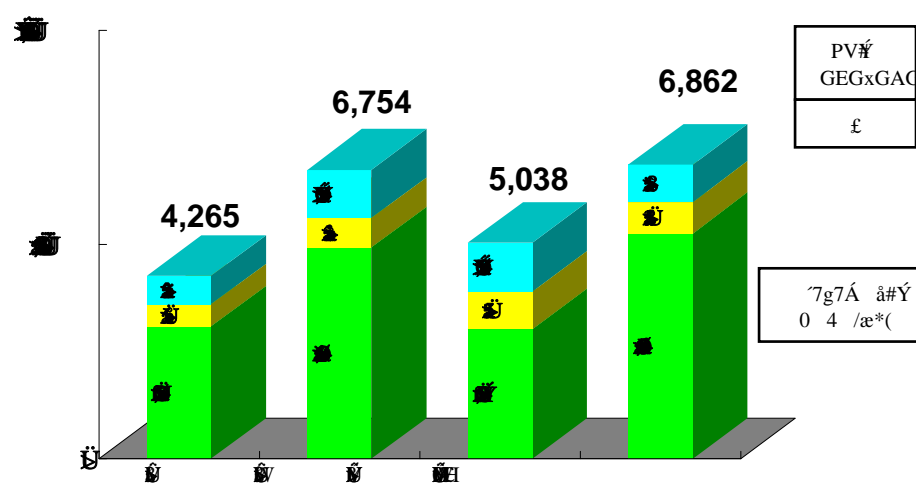
d 8 μ ”0 4 G%FíFp Ú
 G% p \ w ¥FáFp0 FÜ Q •FéG 0b3ûFç



(6E)



(6E)



ú >Ý>Ü>Û>ß ‡ V ‡Fp)¼

7g7Á âGEGxGAG•0 4 /æ*(

G% S ° Ø w @ (Fp ,FyF,G G 0£#iFpFøFÚ
,0d w @FÜ ö aF, , æ ó XG ö aFçFi

>ü? #ÝGEGxGAG• ")

G% ° 6Fy7Á)% O iFÛG ,5 ö aFøFúFóFiF
ŽF»Fû G ÝFçF,) ÝFy0£#iG" V GG

£

G% I ¼Fp0£#iFû PFçF,G G 0£#i)zFû ?4)

>P>Û>Ü>Û>ß ‡ W ‡Fp0b3ûFç

7g7Á âGEGxGAG•0 4 /æ*(

G% , ' i ‡Fy > æ F÷ W ‡Fû7ÿ p

G% ± °GeG{GFG5G=GVG" µG , æFÔ X óFp

G%9× µ+ G%9× "áFp , ° µ' Fp6ä\$Î

>ü? #ÝGEGxGAG•) H ") 2 ŽG" =

G% N | qGkGxGEGxGAG•Fp o A W-Fû FÔF
W-FéG 0b3ûFç

£

G% >FÛG Fp o A0[ÓFû FÔF, M4Š Í W

G% • ¥ d Fp0;*(G" = p

G% ") ¥Fá0... tG"6ä\$Î p

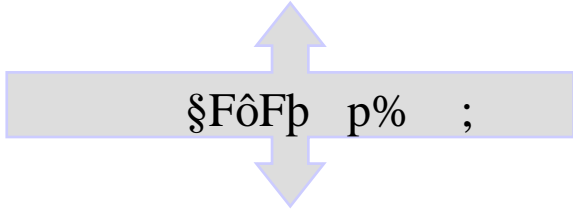
0 4 /æ*(| H ~*_ H)

| H GCGkGŠGV | FûG G GVGŠGM

) 0 4 /æ*(Fø Ø3¶/æ*(

p% Fp S4

) 0 4 /æ*(") , V/æ*(



~*_ G%GCGkGŠGV | Fp Ñ ±

GGGVGQG= p%

FØ 4 /æ*(6õ4 FÇ

G%G•GTGXG•GGFûG G G%*(Fp2 ŽFûG G p

H %?'5GEGŠGyF, Ø3¶4Š G%J) 0 4 FûG G

(á ° Ž XFp Q •FûG G
~*_ Fp j)%5 G Q •

FÆ*_ 6õ4FÇ

G%F\$×Fú ~*_ H £ F, G% >áFø 2AG" -FØG

0... tF,GiGQGVGLGŠG•½EF{GIGG æ _F, i 8

G9GŠGjG•0 H Fp j)%Fû

G G p%

GcG{GŠ p%

FØ 4 /æ*(G%) 6õ4 FÇ

G%*(Fp2 ŽFûG G p

0 4 FûG G

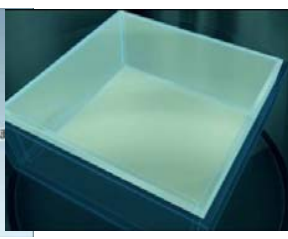
FÇGCGkGŠGV FÇ

G% >áFø 2AG" -FØG

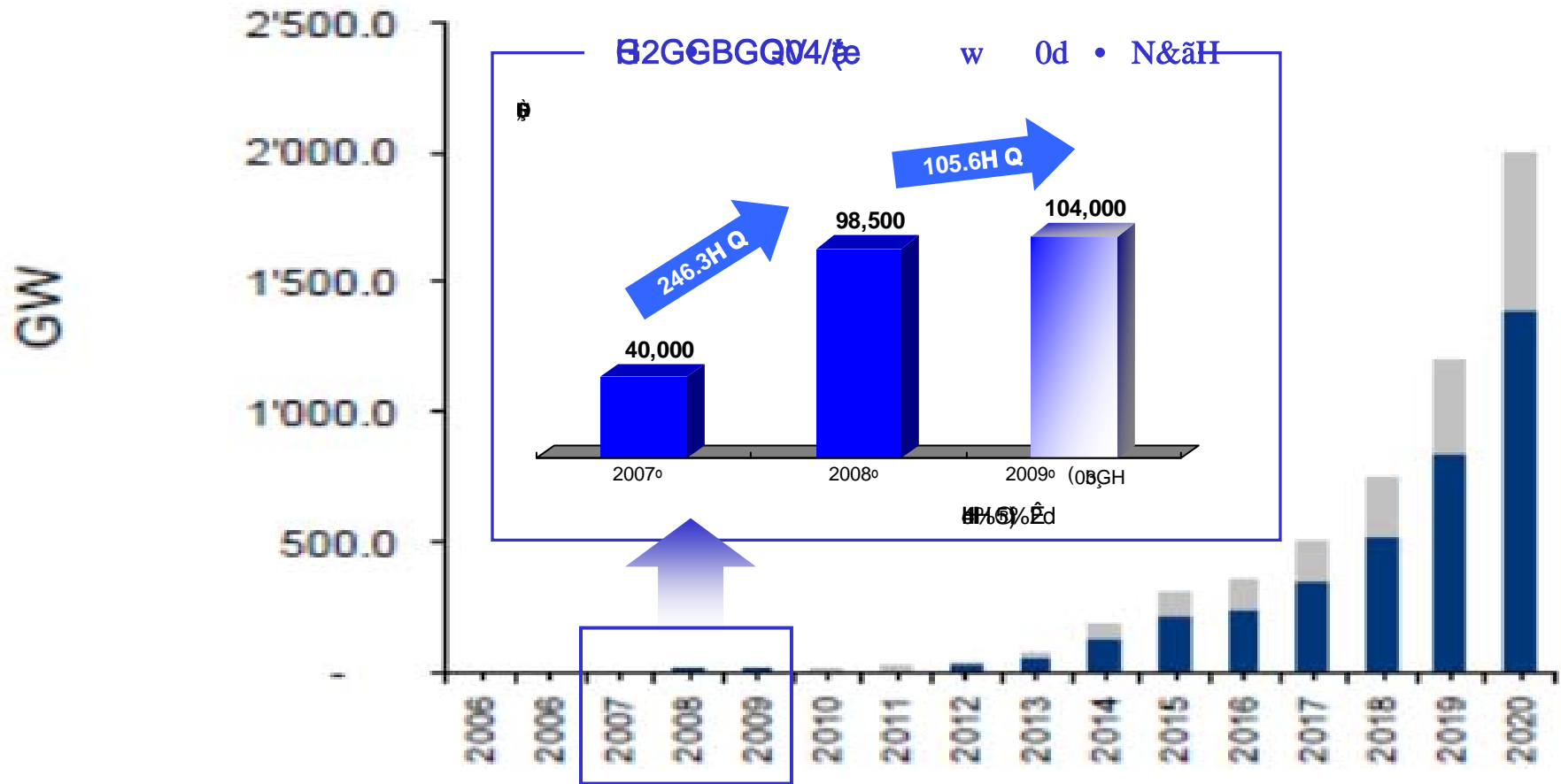
½EF{GIGG æ _F, i 8

d 4 - |FûG G%

%¼,e £ G%GiGQGVGLGŠG... t



Development PV Market



■ Installed c-Moduls
 ■ Thin Film